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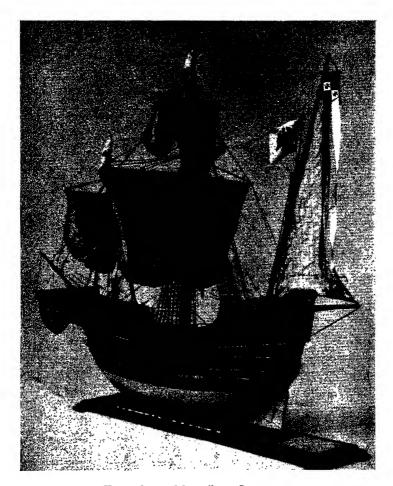
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THE "SANTA MARIA" OF COLUMBUS.

Man and the Sea

Stages in Maritime and Human Progress

by J. HOLLAND ROSE, LITT.D., F.B.A.

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AUTHOR'S PREFACE

Has full justice ever been done to the early sea-explorers? Venturing their all in tiny craft against watery wastes haunted by deathly terrors, they often came to an unknown end or at best met with paltry rewards. Fame and riches were for military heroes. Yet, in general, these effected little more than temporary shufflings of boundaries, while the great sea-explorers revealed new lands, sometimes new continents destined to be the homes of millions. Their work, however, was unseen and remained obscure—an adequate reason for not attempting to narrate it here consecutively and completely.

My aim therefore has been to illustrate this often elusive subject, and chiefly at those points where it affected the future of mankind. Also, as no more new materials seem available about the best known discoverers, I have treated them comparatively briefly in order to deal more fully with others whose work has not been duly appreciated. My guiding motive has been to correlate the efforts of shipbuilders, inventors, explorers and statesmen, and thus to show how the world has been opened up for habitation. This programme is so wide that it precludes all notice of naval wars, polar explorations and all but the outstanding technical details of seacraft. Indeed, I have had to limit my subject mainly to the maritime peoples of Europe. References in footnotes will point the way to further study.

As recent developments in man's mastery of the oceans are well known, I have concentrated mainly on origins. Taking Odysseus and Dampier as figures typical of man's eager search into the unknown, I have tried to point out how their sea-quests quickened primitive and eighteenth-century inquiries into the ways of

men and the workings of Nature. Chapter II inquires how much could be achieved in the age of oars. Chapter III examines some of the characteristics of a non-seafaring people, while the next one reviews the chief nautical developments from the late Roman and Viking age of one-masters to that of three-masters in the Columban age. The great results that followed are then set forth, from the time when Spain became the one and only World Power, to that of the final revelation of the Pacific by Captain Cook. I have also tried to glean from Pacific explorers something as to early human expansion in that ocean. When the last continent was circumnavigated, the challenging effort of Napoleon—"to conquer the sea by land power" claims attention; and I conclude these studies by showing how the Herculean efforts for the suppression of the transatlantic slave trade (helped on as they were by engineering progress) extended the authority of law over all the oceans—assuredly the greatest of human triumphs. In these difficult inquiries I have had help from friends too numerous to mention here. My thanks for advice and permission to use old maps, charts and plans of ships will be found in the List of Illustrations.

As the great oceanic discoveries were made in the age of sails, I venture humbly to summarise my aim in words inspired by Vergil—

Vela virosque cano qui vasta per aequora terras Invenere novas et opes mortalibus aegris.

J. H. R.

Cambridge June, 1935.

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N.B.—The other items are taken mostly from old Voyages, etc. Pacific explorations of 1520—1779 may be traced in the following maps and charts—Nos. 23-26, 28, 29, 32, 33, 39, 40(b), 43, 44, 45, 47, 50.

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CHAPTER I

ODYSSEUS-ROVER, PHILOSOPHER

"The great gulf of the sea, so dread and difficult, which not even the swift gallant ships pass over rejoicing in the breeze of Zeus."—(Odyssey, V, 174-.)

Surely no northern folk, forcing their way southwards to a more genial climate, ever lit upon happier conditions than did the Hellenes on the shores of the Aegean Sea. There, too, they blended with tribes who had long developed seamanship suited to waters abounding in natural harbours and rarely troubled by storms from mid-April to mid-October. Yet the Aegean Sea and its lands combined charm with challenge; for, in the fierce heats of summer, rain fell very rarely, and, even in autumn and spring, often failed to satisfy the needs of the thin and thirsty soil, which then yielded little for man or beast. Thus dire hunger often drove even newcomers to the sea for fish, which there abounded. Who would not risk much to join in the chase of tunny (sometime speared in shoals when driven inshore) each veteran of which offered more food than a starveling Levantine ox? In such uncertain conditions of tilth and pasture even land folk, such as the Hellenes had been, would naturally take to the sea.

Indeed, at the outset of our inquiries, we may note that lack of food and other necessaries on land is, as a rule, the original spur to nautical efforts, which come all the more readily if the sea be not too stormy, if coves or good beaches abound, and are backed by forests of pine or oak and also by cliffs of stone that takes on a good edge. Given such conditions, even in the Stone Age, early man would fashion his dug-out canoe, make

his paddles or oars, and begin to experiment with papyrus, hemp or flax for the small single square sail that would ease the toil of paddling or rowing when the wind was aft. Such probably were the conditions, from the Levant and Norway to Malaysia and Polynesia,

which favoured the first attempts at seafaring.

The change from a landlocked to an almost amphibious existence like ours has, from the start, developed new powers of body and mind—of body, because rowing develops strength and toughness, while all sailors must look ahead, think ahead, plan far ahead. In every good seaman there lurks a potential Odysseus. No wonder that that hero scorned the lazy lotus-eaters of North Africa. For, as our studies will show, primitive continental dwellers, who have plenty of food on shore, generally remained land-lubbers, and therefore slothful and stunted. In truth there is no energiser like the sea. It breeds new faculties and also brings about myriad new contacts that make for civilisation.

Ventures oversea also quicken the sense of awe at the wonders of nature which vivifies the religious and poetical instincts; and the early Greeks and their predecessors worshipped the deities of the sea—fifty fair Nereids (among them Thetis, mother of Achilles); ghoulish Proteus, ever changing into weird forms (a type surely of the utter elusiveness of that element); above all, Poseidon, god of the sea, but also "earth-shaker" (ἐνοσίχθων οτ ἐννοσίγαιος).

Why this epithet? Perhaps because in the tideless Mediterranean, where cliffs are mostly sheer, waves beat straight upon them with resounding thud. Far mightier is the impact of an earthquake billow, such as Crete (mother of earthspasms) often flings off. We can picture Greek oarsmen toiling in summer heat over a glassy sea towards the dreaded Cape Malea, where the drift is always strong, when of a sudden the steersman shouts with fear and points to a dark line quickly forming on the southern horizon. On it sweeps, sucking up

the water before it into a down-like ridge. Loudly they call on Poseidon for help, and vow to him thighs of fat oxen if he will bear them over this portent. Stoutly they ply their oars to mount the towering but as yet crestless summit; and then, while they keep the bow straight in the downward rush and amidst the sandy swirl of the trough, they hear the awesome crash of the monster against the steep cliff of Malea. Therefore, when at last safe on shore, they sacrifice to Poseidon "the earth-shaker." And the name abides.

Such, in brief, are some of the struggles, "nurse of heroes," that make great seamen; and, among a gifted race, there will arise, not merely doers of great deeds, but also, makers (ποίηται) of great poetry. In truth, the Odyssey is the crowning sea epic of all literature; for it bodies forth not only mighty acts but also that sense of poetry in action which arises among a people freshly wakening to the marvels of a new sea-world. No wonder that the exploits of Odysseus possess eternal charm; while he himself stands forth as perfect Greek, unbeaten seaman and father of the earliest world-philosophy of Europe.

Accordingly, I refuse even to consider certain German theorisings about his being a nature god or an agricultural deity. For me he is the great seaman-explorer of the Homeric Age—an age in which Greek seamen, following those of Phoenicia, pried deeper and deeper into the marvels of the Mediterranean lands. The wonders of the New World, unveiled some 2500 years later, were destined to find only inadequate or fragmentary expression in literature, from the time of Camoens and More to that of Shakespeare. But the wonderland of the Mediterranean suffuses the sea-epic of Homer with a eerie radiance; and in the foreground stands the figure of the first and greatest of mariners of the ancient world.

In a phrase which slips in with seeming artlessness among the first scenes of the Odyssey, Homer reveals the real trend of the pre-war life of his hero. Telemachus,

son of Odysseus, is speaking to the goddess Athena, who, in the guise of a captain of the Taphians has entered the hall of the paternal palace in the islet of Ithaca. The lordly insolent suitors of Penelope are there wasting his substance and hers. Eagerly, then, the youth welcomes in the stranger; for from him he hopes to hear tidings of the hero wandering endlessly overseas since the fall of Troy. "Tell me true" (he says) "that I may know full well whether thou art a newcomer, or whether thou art a guest of the house, seeing that many were the strangers that came to our home, for that he too had voyaged much among men." These words light up the dim vistas of the earlier life of Odysseus. Long before the Trojan War that King of Ithaca had sailed far and wide among strange men so that many of them were attracted to his palace in that islet; and perchance this seeming Taphian captain might be one of them and prove a friend in need.

The hope was vain; but the incident serves to reveal Odysseus in a new and startling light. For him Ithaca had been far too small a sphere. "Many were the men whose towns he saw and whose mind he learnt";thus does Homer introduce him to us; and these two passages disclose the inmost longing of the hero-to discover how strange men live. No wonder that, when summoned to the Trojan War, he feigned madness in order to evade that irksome duty. Also how wearisome must have been those ten years of slaughter before Troy, a time that might have been given to "making search what manner of men they are who live here upon the earth by bread." There spake the true Odysseus; he took up that quest again after he had discharged to the full the debt of honour due to Agamemnon, "King of men," and his brother Menelaus. At last, after a decade of misery, the Hellenes had won back the false Helen, and slaughtered her paramour and his people. Now again could Odysseus lead his real life. For we

¹ Odyssey, IX, 89.

must note that the exordium of the Odyssey lays no stress on the hero's homecoming and vengeance on the suitors, but rather on his endless search after knowledge "and the woes that he suffered in the deep." Such, surely, was the life-motive of Odysseus—to observe the ways of men. His thirst to know the world is unquenchable; it extends even to the discovery of the place of darkness and of dawn. He is a discoverer first, a seaman afterwards. He ranges the seas because only so can he unlock the secrets of the world. This, in brief, seems to me the inner meaning of the Odyssey.

But how does this would-be world-explorer fit into the story of the Iliad? How can he drag on through those ten years on the windy plain of Troy, in order merely to bring back Helen to dull-witted Menelaus and that wavering, wobbling "King of men," Agamemnon? There is a problem which taxes the skill even of Homer. For Odysseus is great both in war and in counsel; while the hero of the epic, Achilles, though a mighty warrior, lacks brain power, and is a prey to mere impulse. As we all know, the theme of the Iliad is the wrath of Achilles as manifested during part only of It is an intensely human study in the last campaign. outraged dignity and sexual passion, and therefore fury against Agamemnon the raptor of Briseis. Just as the guilty love of Paris for Helen brings united Greece against Troy, so does Agamemnon's offence paralyse that attack in many ways which the poet tracks with eager interest. Accordingly, Odysseus is a secondary figure, kept artistically in the background. Yet Homer in two rapid scenes hints at his transcendent importance He does it so skilfully that we have to in the war. reflect before we discern the really great part which Odysseus plays even in the Iliad.

Let us glance at these two scenes. The first occurs

¹ Odyssey, I, 1-4. But see Prof. W. J. Woodhouse's Composition of the Odyssey, Chap. 3 for another interpretation.

² Ibid., X, 190 ff.

when Zeus by a dream tempts Agamemnon to make a sudden assault upon Troy; and he, perhaps half in doubt, thereupon proposes to subject his troops to a searching test-"I will speak to make trial of them as is fitting, and will bid them flee to their benched ships."1 Of course the sequel is a mad rush for home. At once the goddesses who champion the Greeks set to work to repair this ruinous mistake. Hera rouses Athena; and she speeds from Olympus to incite Odysseus, "rich in counsel," to stay this headlong rout. Readily he obeys her behest. To him the bewildered Agamemnon entrusts his sceptre; and, armed with it, the great seaman drives back the craven throng, telling them that the "King of men" is but testing them. And when spiteful little Thersites jeers at the crowd turning back to reason and duty, Odysseus silences him with blows, till the fickle runaways laugh at his disgrace, and hail this deed of Odysseus as the best of all that he has wrought for the Argives. Meanwhile, even at this urgent crisis, no other leader comes forward. Agamemnon and Menelaus sit in dazed silence; Achilles sulks in his tent; Ajax and Diomede do nothing to stay the rout; Odysseus alone holds it up; for he, the tried sailor, knows how a retreat to the ships must end with panic as they drag them down the beach in sight of the exulting Trojans. Besides, those who escape will surely perish when their "rotten" craft encounter the waves. No wonder is it that Agamemnon hated Odysseus, and not long after falsely upbraided him with shirking the conflict.2

Yet, even so, after the wall of the Greek camp is forced, Agamemnon inclines once more to flight; for such is the advice of Nestor. Again he orders the Greeks to drag down and moor out at sea the first line of ships, and be ready at nightfall to rush down the

¹ As Dr. J. T. Sheppard well says (*The Pattern of the Iliad*, p. 26), this is Homer's way of stating that Agamemnon is in the grip of Infatuation (Ats).

² Iliad, IV, 335 ff.

rest of the ships and escape: "for there is no shame in fleeing from ruin, even in the night." Then again spake forth Odysseus: "Oh! Man of mischief, sure thou shouldest lead some other inglorious army and not be King among us. For the Achaeans will not make good the war when the ships are drawn down to the salt sea, but will look round about to flee, and withdraw from battle." Thus again it is the experienced seaman who averts a fatal panic. Agamemnon plucks up courage and leads the Greeks forward; whereupon Poseidon comes on the scene, takes him by the hand and raises a mighty battle-cry, like nine or ten thousand men.¹

A second time, then, Odysseus saves the Greek host from ignominious rout. Among the Greek chieftains none but Diomede steps forth to uphold him. Idomeneus, lord of eighty Cretan ships, is silent; so too are the Athenians. Only the King of little Ithaca dares to rebuke the "King of men." This second episode seems incredible among a people skilled in sea lore. But in the *Iliad* nothing is more surprising than the lack of sea-sense among the Greeks. Never is thought given to the fleet, on which all depended; seemingly it rots away unheeded except when the Trojans attack it; no new ships come to replace the outworn, or bring reinforcements and supplies of food. Equally landminded are the Trojans and their allies. Never do those allies attack the Greek fleet from the sea, while the Trojans press on it from the land.

Indeed the sea figures scarcely at all in the *Iliad*. Interest centres solely in the military heroes of both sides and the deities who aid and abet them. The sea is merely the tool of Poseidon: and even he appears rarely in it, and generally figures as a land deity. Once, however, when the Trojans seem about to destroy the Greek fleet, Poseidon defies the *fiat* of pro-Trojan Zeus (then in absent-minded mood). From his outlook seat

¹ Iliad, XIV, 80 ff.

on the crest of Samothrace the sea god strides quickly down towards his abode under the waters at Aegae, and thence rises to skim over the waves in his car swiftly drawn by bronze-hoofed horses, while the sea creatures gambol around their lord. Thenceforth he acts as an ordinary god, encouraging the Greeks and marshalling them against the Trojans. But when Achilles begins his final exploits and is about to slay Aeneas, the sea god (latterly pledged to neutrality) flits in, sheds a mist before the eyes of Achilles, and swings his victim high from off the earth, because the fates will that through him the race of Dardanus shall live on. Thus starts the legend which, with the favour of Poseidon, brings the son of Anchises and Aphrodite to Italy to be the founder of mighty Rome. But that is another story.

Clearly the Iliad is a land epic: its heroes stand or fall by their prowess with the spear or sword; and the one great seaman who figures in it is valued solely for his counsel and cunning. Why this stress on the cleverness of Odysseus? Surely because the typical sea-captain must in the highest sense be a handy man, able to use his wits quickly in far more difficult situations than landsmen ever face. He and his crew in their tiny craft confront a treacherous element covering rocks and shoals and now and then raising up mountainous waves. On its shores dwell strange men, equally fickle and always distrustful of strangers. What a contrast between the seamen's ever-changing life of trial and adventure and that of the peasant! No wonder that Odysseus, the trained sea-rover, excels in adroitness and guile the soldier, whose duty is to follow the lord of the loud battle-cry. Note, too, the farewell, in the Odyssey, to the conquerors of Troy! During ten years have they camped on the north-east border of the Aegean; yet none, except Odysseus, knows the way back to Greece; and this question raises eager strife between them at Tenedos (the limit of their certain sea-knowledge!)

¹ Iliad, XIII, 10 ff.

² Ibid., XX, 305-25.

Even Nestor attributes the quarrel to the anger of Zeus. Contemptuously, then, are those land heroes consigned to the perils of the Agreen 1

to the perils of the Aegean.1

The sea-epic, called after Odysseus, deals with a far different world, variegated by diverse communities obeying their own laws and customs, as to which the hero feels keen curiosity. It is this inquisitiveness into a new order of things, emerging from the tumult of what was to Homer a world-war, which endows the Odyssey with unique interest. The Iliad rarely envisages anything beyond the life of the Greek camp, save when it dwells (perhaps half jocularly) on the domestic brawls of the Olympians, who decide the fate of mortals. On the other hand, in the Odyssey the interventions of the gods are less frequent. The insatiable wrath of otherwise fickle Poseidon is provoked by that remarkable experiment of the hero on the eye of Polyphemus.

Further, while the *Iliad* names next to nothing beyond Greece and the islands and shores of the Aegean, the world of the *Odyssey* includes North Africa, Phoenicia, Sicily and probably the Lipari Isles and South Italy. Like Camoens for the Portuguese explorers of the East Indies, Homer loves to peer into the outer Mediterranean world then being unveiled by the Phoenicians. Whereas the *Iliad* scarcely refers to these enterprising voyagers, they are often referred to in the *Odyssey*, which bears clear traces of their influence; and it embodies pre-Greek sagas of the Mediterranean peoples, e.g. those of Cyclops, of the goddess nymphs, and of the descent into the spirit world. On these legends the Ionian author of the *Odyssey* embroiders with vivid and daring imagery, figuring the Odysseus of the Polyphemus episode as

¹ Odyssey, III, 159 ff. Homer's epithet for Odysseus is πολύτροπος, i.e. much turned about. A secondary meaning is much turning, versatile, cunning; and in later Greek literature, also in Vergil, this came to be his chief attribute.

² See, however, Dr. Sheppard's *Pattern of the Iliad* on the celestial machinery: also J. L. Myres in *Journal of Hellenic Studies* (1932).

² See this influence (probably exaggerated) in Bérard's Les Phéniciens et L'Odyssée, passim.

acting with foolhardy rashness and offending Poseidon so that the hero's homecoming is long delayed. By the will of the sea-god he becomes the typical world-explorer of the early Greeks. He narrates his adventures at the court of Alcinous, King of the Phaeacians; but, as he follows close on the minstrel's recital of the legend of Ares and Aphrodite, obviously only the personal and fantastic side of his story can be set forth. We therefore get no nautical details, which would bore those people, lords of the long oars. His saga is as follows:—While the Greeks quarrel about their homeward way, Odysseus breaks away with twelve ships (the same number with which he came to Troy¹) and makes for the coast of Thrace, the wind favouring. There he wantonly sacks the city of Ismarus, and slays the men, but owing to the greed and lust of his sailors, suffers a dire repulse from the neighbouring tribes, and loses six men from each of his ships. Not to this brutal piracy but to Zeus, the cloud-gatherer, does he ascribe the next calamity; for a mighty north wind swoops on them, and on the third day drives them headlong past the dreaded Cape Malea and friendly Cythera. Sick at heart, they drift southwards for nine days, that is, past all waters and lands then known to the Greeks, and pass into fairyland for the space of ten years.² Only this part of the epic concerns us here.

In what must be North Africa, the joy of search possesses Odysseus; and when at last they have beached their ships and eaten food, he sends on three seamen to "seek out what manner of men they were who here live upon the earth by bread." Thus they discover the

*The northerly storm should have blown Odysseus to Crete, but Homer wafts him into fairyland and weaves about this part of the story the "Deep Sea Yarns." But I regard them as more lifelike than the five trumped-up yarns

of Odysseus in Books 13, 14, 17, 24.

¹ Iliad, II, 636; Odyssey, IX, 39, 159. Probably the author of the Odyssey here follows the Catalogue (at the end of Iliad Book II) which scholars generally admit to be a later addition to that poem (see W. Leaf, Homer and History, pp. 106 ff.). This seems to be another proof of the much later date of the Odyssey.

lotus-eaters-kindly creatures whose honey-sweet fruit would unman them all and root them there for ever. So he drags back the three searchers, weeping, binds them under the benches of the "hollow ships," and bids the others ply their oars seawards. At this time his authority as King and captain prevails even over weary and thirsty crews, who need a long rest. Clearly, the lotus-eaters' life has no charms for the hero. Thence they sail on aimlessly, and come to the country of the fierce and lawless Cyclopes, cave-dwelling giants who live on their flocks; each is a law unto himself, his wives and children—a state of primitive anarchy which arouses the curiosity of Odysseus. Ships they have not; for near by is an untilled island, swarming with wild goats whom no hunters had molested. There the ships of Odysseus are beached and for a whole day he and his men "feast on abundant flesh and honey-sweet wine." On the morrow the thirst for knowledge about those giants besets him; and with one ship he sails across to their land. Despite the warnings of his crew, he, armed with a skin of strong wine, visits the dread monster, Polyphemus.

We know the rest. But mark the foresight of Odysseus. He will not slay that loathly cannibal, now gorged with the flesh of six Greeks, but, making him drunk with the wine, blinds him: and so, when at dawn the giant lets out his flock to pasture, the survivors escape from the blocked up cave under the bellies of the sheep, Odysseus clinging under the great ram. Would not Achilles, Ajax or Diomede have slain Polyphemus forthwith, and then starved with the survivors, all alike hopelessly shut in the cave? Not so Odysseus, "rich in counsel." By wit and wine he blinds the mighty anarch and escapes.

Victor Bérard, in his keenly imaginative work, sees in Cyclopsland a faithful version of volcano-land and islets skirting the Bay of Cumae; the one-eyed giant

¹ Bérard, Vol. II, p. 108, locates them in the Isle of Djerba off the Cyrenaica.

(son of Poseidon), able to hurl mighty rocks seawards, being the crater belching forth stones. The conjecture is brilliant and plausible; for the extinct volcanoes backing that bay, dot the landscape with ogre-like eyes, while giant rocks jutting into the sea might figure in legend as torn off peaks. Also the natives were noted for wildness.¹ That quality clearly attracted Odysseus more than the softness of the lotus-eaters.

Thus, thanks to Bacchus, the great sea-captain makes head against the mightiest offspring of the sea. Nevertheless, that element wreaks its revenge on this over-daring mortal. Poseidon hears the last prayer of his blinded son: and though the second peak hurled at Odysseus' ship just misses its stern, yet the giant's curse gets home. And so the Ithacan King is doomed long to wander, to lose all his comrades and reach home at last in evil case. Doom falls most heavily on the sailors. In the main they figure as heedless creatures, swayed by the whim of the moment, and now after the rash visit to Polyphemus they begin to turn against their usually farseeing leader. Their petty jealousy of Odysseus leads them to loose the bag of Aeolus, when in sight of Ithaca, and the escaping winds drive them right back to the isle Aeolian. A still worse lot befalls them in the cliff-bound inlet of the isle of the Laestrygonians. While the now cautious chief ties up his craft to a rock at the entrance (Homeric ships have no anchors), the other crews heedlessly press right in to that landlocked harbour. Result: the others are crushed by the stones hurled on them by the cannibal islanders, whereas the cautious Odysseus and his crew escape. Moral: Don't thrust your ships deep into narrow creeks dominated by sheer cliffs. the open sea rather than be trapped by unknown men.

Even so, when they come to Circe's isle, the insatiable curiosity of Odysseus bids him once again explore; for "we know not where is the place of darkness or dawning, nor where the sun, that gives light to men,

¹ V. Bérard, II, Chap. 2.

goes beneath the earth, nor where he rises." His suffering crews will have none of it; but his lordly mind spurs them on, and he sends forward three and twenty of them to prospect, "all weeping." They fall victims to that goddess nymph. Not so Odysseus. Warned by Hermes, he evades her wiles. Nevertheless, he has to abide there a whole year, and thereafter voyage far beyond the outermost stream, Oceanus, to Hades. There, he discourses with the ghosts of departed heroes. Nothing, not even the spirit world, is closed to the master seamen; and there he learns how to avoid future perils, above all, to leave alone the sacred oxen of the Sun.

Soon he sails near the fair Sirens, chanting their fatal lavs on the rocks of North Sicily, and he bids his crew bind him to the mast, stopping his ears with wax lest their song lure him to his doom. The lure was tempting; for to him they sang, not of love, but of a promise of infinite knowledge—"Lo, we know all things—all that shall hereafter be upon the fruitful earth."² Caution on his part also saved all his mariners from the deadly indraught of Charybdis, and all but six escaped the mad grip of Scylla. But thereafter, at sundown, their utter weariness, also the pangs of hunger when they heard lowing of oxen and bleating of sheep in the Island of the Sun, brought on a downright mutiny. He had to give way and let them land, whereupon they soon slaughtered the sacred oxen and incurred the wrath of Helios and Zeus. Six days of feasting on the sacred kine were punished by the drowning of all but Odysseus. Amidst dire perils he escapes on a mast, and, paddling desperately with his hands astride the broken-off mast, after nine days reaches the isle of Calypso.8 That

¹ Odyssey, X, 190 ff. It seems scarcely reasonable to interpret these words, in the almost constantly clear Mediterranean, as meaning no more than "we don't know which is west or east."

² Ibid., XII, 191.

³ That isle, Ogygia, is his farthest west. Some writers place it outside the Pillars of Hercules.

goddess nymph detains him nine years, and at last Poseidon casts him in sore plight on the Phaeacian Isle.

So ends his narrative at the court of Alcinous. nautical details are provokingly few; but they imply friendly relations between the King-captain and his crews, until these become weary and half-mutinous under excessive toils and dangers. He forbears to tell the Phaeacians of the life on board: by what means they kept food and drink nine days in those cabinless craft, and how their helmsmen kept the boat's head before the wind during that long tempest, so that they never broached to in the trough of following billows or capsized in the surf piled up on the opposite coast. For these and other human details we would sacrifice reams of talk about the whims of the gods and the wiles of goddess nymphs. But how men lived in those frail craft, and how these rode out the storms, are questions below the dignity of verse. One seamanlike act Odysseus describes, namely, how, during his voyage from the isle Aeolian homewards, he himself ever held the sheet of the sail, "so that we might come quicker to our own country"—a proof that an experienced captain, who watched the least shifts of the wind could get most way on his craft. But he says little more to the Phaeacians, perhaps because Alcinous had described their vessels as understanding the intents of men, so that they find their own way even through mists and never are wrecked.2 Only when Calypso helps Odysseus to build his little raft-boat in four days does the poet describe the tools wherewith he works this marvel. So, too, only when Athena (in disguise) sits with Telemachus in the stern of his ship and wafts it on with her breath, are full details of the voyage deemed a fit subject for an epic.8

¹ Odyssey, X, 34. 1 Ibid., VIII, 558 ff.

^{*} Ibid., V, 233-61; for an account of Odysseus' boat and that in which Telemachus sailed to Pylus, see my Mediterranean in the Ancient World, pp. 28-31.

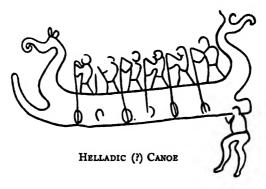
In general the "wine-dark sea" (odd epithet!) arouses feelings of fear or hatred. Odysseus deems it "dread and difficult" (see the motto); and he was "shamefully broken in many waters." Éven King Alcinous, protected from enemies by "the great gulf" of the sea, feels that Poseidon envies the happy Phaeacians because "they give safe escort to all men." The actions of that sea-god are unaccountable. Indeed all progress at sea is paralysed by constant reference to him or to Zeus. Why trouble about rigging or tackle when the nod of a god decides everything? Accordingly we know nothing about the sea-sense of the early Greeks and little about their seamanship. Apparently, Odysseus never thinks about improving his vessel; and no important change takes place in the traditional Aegean rig and build of ships for ages, until Corinth invents the trireme for war.¹ Yet a man of Odysseus's cleverness must have noted the need of a mast near the bow so as to keep the boat's head before the wind as she scuds before the storm. Nothing, seemingly, was done in that direction until the great Alexandrian grain-ships developed the artemon (bowsprit-foremast).2 The slavery of the Greeks to the traditional rig condemns them as seamen. They showed none of the inventiveness which (as we shall see) marked Polynesians, especially those of the Ladrones, who rejoiced in sailing their "flying proas" with outriggers. But there the constant wind favoured inventiveness in sailing, which perhaps was paralysed by Mediterranean calms. Certainly the Greeks, with all their wonderful culture, displayed no originality in navigation, which required the brain power of divers peoples in diverse conditions to produce that marvel, the ocean-going ship. Our studies will reveal the need of wide human contacts, varied progress in handicrafts and metal work, as well as daring imagination and aptitude to

¹ Thucydides, I, 13.

² C. Torr in *Ancient Ships* (Plates) shows none that carries a bowsprit-foremast earlier than A.D. 186-200.

learn by failures, which at last enabled man to conquer the sea.

As for the Homeric ship, it lay low in the water amidships for the sake of rowing—a need which in the age of oars imperilled all craft during a storm. The bow and stern were raised somewhat, and each had a small deck (hence the epithet "well-decked"); but there was no hold, properly so-called; for, when off the lotus land, Odysseus bound his three entranced mariners under the rowers' benches. As there was no shelter on board, the running before a nine days' storm was a time of unending toil and utter misery, over which



the poet draws a veil. For the rest, steering was done by a movable paddle, or paddles, astern. There was no anchor; its place was taken by stones (eivai) lowered from the bow; or else the stern was tied to a rock ashore. Amidships was the single movable mast, carrying a square sail, used only when the wind was favourable. But, in that sea of frequent summer calms, the chief reliance was on the oarsmen, of whom there were in the Homeric ship generally twenty.² Passages assigning forty or fifty rowers are doubtful except the

1 Odyssey, IX, 70 ff.

^a Torr, C. (p. 3) doubts the authenticity of *Iliad*, XVI, 170 which gives to Achilles 50 rowers. So, too, I question the statement of Seymour, T. D. (*Life in the Homeric Age*, p. 308) that Odysseus had on board 46 men after he lost six to the Cicones and six to Polyphemus.

one which gives fifty-two noble youths as rowers to the wondership despatched by Alcinous to take Odysseus to Ithaca. She was propelled by them all night with speed greater than that of a hawk, "of winged things the swiftest." And ever she sped surely on her way, while the hero slept soundly and safely on the rear platformitself a miracle. This heaven-blest homeward voyage was only the climax of the marvels of the Phaeacian Isle. Homer of course does not explain how fifty-two oarsmen

could be effectively placed in an ordinary craft.

Of course, the Phaeacian episode is all in wonderland. After being tossed about from lotus-eaters to man-eaters, from Hades to witchland, the hero lights upon a veritable Elysium. It is placed far beyond the blasts of Boreas, in the track of the genial west winds which banish winter. No enemy may reach it; for it is a remote island; and (as we shall see) the perfect life was always relegated to such a shelter. Also Poseidon dowers those lords of the long oar with mastery over "the great gulf" which keeps away ordinary seamen. Thus the Phaeacians live a life free from care, rejoicing in the fruits of the earth. While the men are lords of the sea and excel in all sports, the women are skilled at the loom; and all arts there flourish. It is a paradise for women. No picture in ancient literature equals in charm that of Nausicaa, daughter of King Alcinous, going a-washing, and then a-playing, with her maidens down by the sea. There in a woodland glade she espies the shipwrecked hero flung naked on to the coast. Casting away fear and maidenly shrinkings, she forthwith gives him hospitable and princely welcome as befits those who "live in the wash of the sea, the outermost of men," for "all strangers and beggars are from Zeus."2 Glorified by Athena, he enters the wondrous city and palace of the King, marvelling at the goodly ships, the mighty walls, the ever fruitful gardens. At the Court of Alcinous he finds perfect hospitality.

¹ Od., VIII, 39.

² Ibid., VI, 204-8.

Where is this island of the blessed? Clearly it lies far away from all land and well to the west of Ithaca; and these facts are fatal to the claim of Corcyra (Corfu) to be that happy isle. For Corfu is near the mainland and only 100 miles away from Ithaca; also the magic ship granted by Alcinous glides to Ithakca in one nighta poor performance for a super-hawk. No! Homer pictures this perfect community as far away in the great sea and therefore beyond the reach of enemies. Probably sailors' talk (some dim rumour from Sicily or beyond) kindled in him this glorious fancy of a god-blessed island, free from the curse of greed and war. He, and after him Hesiod (Works and Days, § 168), are the first of the wellwishers of mankind who pictured a blissfully peaceful life in an island far off in ocean. Their influence in promoting search for Isles of the Blest is incalculable.

As for the Phaeacians, they are Greeks; for they understood Odysseus at once; but the only taunt there levelled at him is by sports-proud Euryalus, who taunts him with being a trader.2 Clearly, then, the Phaeacians are not Phoenicians, as Bérard and others have surmised. They are idealised Greeks, living a self-sufficient yet bounteous life, albeit unspoilt by their marvellous fortune. Just as Sir Thomas More's Utopia beyond the Ocean was suggested by the stories of "the very famous and renowned travailer, Ulysses," also by "Amerike Vespucce" and other explorers, so too, Homer's Phaeacia idealises the seamen's tales which filtered through from the far West. Alas! His vision of a new Greece soon fades. Odysseus, after that god-given slumber on the wonder-ship, which ends the decade of voyaging in elfin land, awakes to grim reality in Ithaca.

¹ Thucydides, I, Chap. 25. ² Od., VIII, 160 ff.

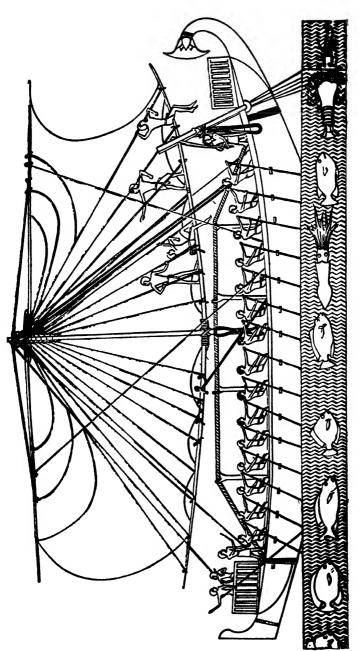
³ St. More (*Utopia*, Book I, and the *envoi* of Peter Gyles) acknowledged his debt to the *Odyssey*, as well as to stories about Columbus and Vespucci; and he must have known about the legend of the Isle of St. Brendan. Later, we shall note the influence of such islands on explorers.

With true poetic insight Tennyson concluded that the rover-philosopher would not end his days there:—

That is the spirit of insatiable curiosity which made Greece great in all spheres of life. It exalted man and opened up the world.



ISIS PROTECTING A SHIP



EGYPTIAN SHIP OF about 1500 B.C.

CHAPTER II

DID THE PHOENICIANS CIRCUMNAVIGATE AFRICA?

"It was after holding converse with the statue of Amen in the dusk of the sanctuary that Queen Hatshepsût despatched her squadron to the Land of Incense" (Maspéro).

WE can picture the great queen framing that momentous resolve. Alone in the deepening gloom among mighty statues, her soul would rise to some high effort on behalf of the god. Perhaps the need of more supplies of balm and incense was urgent. However that may be, she forthwith decided to despatch five ships to the Land of Incense (the Land of Punt). Thus a religious motive led to the first clearly known maritime expedition, about the year 1500 B.C. It is recorded in sculptures which show five ships, first setting out unladen and high out of the water, then laden with animals, woods, and myrrh (or incense) trees in tubs. The inscription records that they returned laden "very heavily with marvels of the land of Punt, all goodly fragrant woods of God's Land, heaps of myrrh resin, with fresh myrrh trees, ebony and pure ivory, gold of Emu, cinnamon wood, khesyt wood, two kinds of incense, eye-cosmetic, apes, monkeys, dogs, skins of the southern panther, along with natives and their children. Never was brought the like of this for any king who has been since the beginning." Such is the inscription on the wall of the queen's temple at Thebes, where also the five ships are shown setting forth and returning laden.2 The

¹ The first recorded sea expedition dates from the 28th century B.C.

² The accompanying plate shows one of the ships setting forth, unladen and rather top-heavy, with thirty rowers and the single square sail set to the favouring wind. Note the steering paddles, also the look-out men at the bow with sounding pole or weighted rope.

importance of myrrh for embalming and incense trees for religious services is emphasised as a tribute to the piety of the great queen, though one item of the cargo shows her not indifferent to the claims of fashion.

Where was that Land of Punt (or Punet)? Clearly it was a populous land near the sea, abounding in aromatic trees and shrubs, where also gold, ivory and skins of the southern panther were procurable. Some authorities identify it with North Somaliland where such trees grew on slopes termed "The Ladders of Incense." But others, laying stress on the gold, ivory, and apes and panther skins, place Punt further south, perhaps around the River Juba, or even as far as the first good natural harbour, Mombasa. question is insoluble; but it may safely be said that Punt could not be in Arabia but was far along the coast of Africa, probably beyond Cape Guardafui. The ships indicated by the sculptures are large sea-going ships, capable of voyaging far beyond the limits of the Red Sea. Indeed the inscription emphasises the wonder of the exploit. The queen's half-brother and husband, Thutmose III, who succeeded her, was so jealous of her fame that he walled up this inscription; and only in modern times has corrosive and retributive Time revealed it to the world. It is certain, then, that so early as 1500 B.C. Egyptian ships could voyage far down the coast of Africa and bring back heavy loads.

Clearly this expedition bears on the question which we are now to consider—that of the alleged circumnavigation of Africa by Phoenician ships at the orders of King Necho of Egypt about 600 B.C. For if, 900 years earlier, Egyptian ships and crews could perform the exploit just noticed, it was by no means incredible that a voyage of circumnavigation should be accomplished after that lapse of time by Phoenician seamen in his

¹ Maspero, Mariette, also Breasted, Lane Poole and L. Griffith identify Punt with North Somaliland. Sir Wallis Budge, also Admiral Ballard in Mariner's Mirror, VI, place it much farther south.

service. Here we must remember that about 1100 B.C. Egypt fell on bad times, and her naval supremacy in the Mediterranean passed to the Minoan dynasty in Crete, to which Thucydides (wrongly) assigns the first navy. Thereafter mastery at sea went to the Phoenicians, who excelled by nautical and trading skill rather than by brute force. We note, in passing, that these transfers of sea power probably resulted in part from the exhaustion of large timber in Egypt and then partially in Crete, while the Syrian supplies were inexhaustible. To the sailors of Tyre and Sidon the land-loving Egyptians and Hebrews entrusted nearly all of their seaborne trade. Thus, about 1000 B.C., King Solomon agreed with King Hiram of Tyre as to the floating of Lebanon timber to Jaffa for the building of his temple at Jerusalem. Also for him that King despatched once in three years ships from Eziongeber at the north-east end of the Red Sea, to a land whence they brought back gold and ivory, apes and peacocks.² All who have eyes to see aright the significance of the seeming trifles of history will discern in this quaint cargo the character of commerce in its infancy. Once in three years ships voyaged beyond the Red Sea in order to bring back merely playthings and adornments for a king's court.

As to the country whence they were brought, commentators have been wildly at sea, pointing to India or Ceylon—as if the sailors of Hiram would voyage across the Indian Ocean, or else follow the deep windings of its north coast, in order to procure objects which they could get equally well in Africa. Somaliland, Jubaland farther south, would provide plenty of gold and ivory, apes and peacocks. Phoenician seamen certainly coasted far along Africa; for in variety of produce it exceeded Arabia, the other possible area,

¹ Thucydides, I, Chap. 4.

^{2 1} Kings x. 22. Purchas (Pilgrims I, § 6) places that Land of Ophir between Pegu and Sumatra, because of some verbal resemblances!

besides which its coastline led on to tropical and well-watered regions. Therefore when the supplies of balm, incense, gold and cosmetics in Somaliland were exhausted, the dictates of religion, power and fashion would urge traders southwards. Was it not likely that so active and ambitious a king as Necho would seek for new sources of supply? These could be found only in the South, for by his time the Phoenicians, Carthaginians and Greeks were exploiting all the Mediterranean and adjacent coasts, and Assyria and Persia dominated those of Asia.

Further, as the Egyptians had lost their seafaring energy, he would naturally send Phoenician seamen for two reasons; he had control over them, and they were by far the best long-distance sailors of that age. During some five centuries they had voyaged the whole length of the Mediterranean to Gades and back, or to Punt and back. Think what a voyage to Tarshish (South Spain) or Punt involved. The seamen must be able to steer by the stars at night, to ride out the squalls of the West Mediterranean, or, in the Red Sea, to row in torrid heat, and at the end of the day to discern hollows in the arid coastline where by digging they could find water. Surely, if they could voyage along the Red Sea, they could voyage along any of the coasts of Africa, for the Red Sea was the worst part of the whole voyage. Indeed, men trained to reach Punt could go anywhere; and we know that, from the times of Solomon and Homer, Phoenicians ventured very far to get gold, balm, unguents, and eve-cosmetic, in fact anything that would please women; for women were always the best customers. The Tyrians therefore encouraged display, and were in favour at all luxurious courts.

Such, then, were the seamen, greedy but skilful and tenacious, whom Necho employed. Both he and they had good reason for trying to find a new way to the tropical lands of Africa, which the Carthaginians had begun to open up by what we should call the Atlantic

route. Therefore, as Africa was believed to be comparatively short, an attempt to double it lay in the nature of things; and not only Phoenician avarice but also the express command of Necho would exact the utmost energy in this royal enterprise. To return beaten, up the Red Sea, would probably involve execution.

But, even with Phoenician crews, was the circumnavigation of Africa feasible? Certain critics deny that They point out that the small ships of that age, mainly dependent on oars, could not possibly traverse some 13,000 miles of almost unknown coastline, much of it desert, parched and unhealthy; and that seamen, having no compass to guide them, or charts of the rocks and reefs, could not possibly survive.

In reply it may be urged that the size of ships had increased since the age of Rameses III—the age in which their details are best known.1 The long-distance voyages to and from Gades or Punt compelled the adoption of broader and more seaworthy vessels capable of carrying heavy loads and withstanding gales. But ships of moderate size, drawing about five feet of water, and, having both sails and oars, were well suited to coastal exploration, especially in tropical seas where calms or light airs prevail. They were also safer than large ships. Indeed, later explorers often sent in pinnaces to explore bays and shallow coasts—work for which large vessels would be utterly useless. The modern glorification of mere bigness and speed is utterly out of place in this connection. Further, in the Phoenician and other early ships men were posted at the masthead or on their elongated prows to look out for rocks. dangerous places others would swing long poles or weighted ropes to sound ahead; and backwatering would save these row-vessels from rocks on which a large

¹ Maspéro. (The Struggle of the Nations, p. 197) describes these as from 20 to 25 yards long, 5 feet deep, with an open hold, and no cabin. These were doubtless warships. The later merchantmen must have been wider and deeper. See Xenophon, Economics, Chap. 8.

sailing or steam ship would crash to her doom. No: the Phoenician ships were very well adapted for circumnavigation. Probably they were more seaworthy than the narrow canoes with low freeboard in which (as we shall see) the Polynesians spread all over the Pacific Ocean. Also Africa is the one continent which can be circumnavigated without great difficulty, its coasts being singularly even and devoid of death traps. As fish abound off all its coasts the food supply would never wholly fail.

It is time now to turn to the direct evidence as to the alleged circumnavigation of Africa. It consists only of a few sentences of the Greek historian, Herodotus, who wrote about 440 B.C. After describing the efforts of Necho to build fleets in the Red Sea and the Mediterranean, and to construct docks, the remains of which were still visible, he gives the following brief account of the outline of Libya, and of its alleged circumnavigation:—

"As for Libya, we know it to be washed on all sides by the sea, except where it is attached to Asia. This discovery was first made by Necho the Egyptian King, who, on desisting from the canal which he had begun between the Nile and the Arabian Gulf [Red Sea], sent to sea a number of ships manned by Phoenicians, with orders to make for the Pillars of Hercules, and return to Egypt through them and by the Mediterranean. The Phoenicians took their departure from Egypt by way of the Erythraean Sea and so sailed into the Southern Ocean. When autumn came they went ashore, wherever they might happen to be, and having sown a tract of land with corn, waited until the grain was fit to cut. Having reaped it, they again set sail; and thus it came to pass that two whole years went by, and it was not until the third year that they doubled the Pillars of Hercules and made good their voyage home. On their return they declared (I for my part do not believe them, but perhaps others may) that in sailing round Libya they had the sun upon their right hand. In this way was the extent of Libya first discovered."2

That is all the direct evidence extant concerning the alleged circumnavigation of Africa; and several critics decry it as transparently thin; for only Herodotus

² (Libya is the more correct term; but I use Africa as being the usual one.)
³ Herodotus, Book IV, Chap. 42 (Rawlinson's translation).

recorded it, and he disbelieved what is a vital part of the story, viz. the position of the sun. Also he gave no details of the marvels seen on the way (as was his wont); and clearly he regarded the voyage as of little importance or interest.

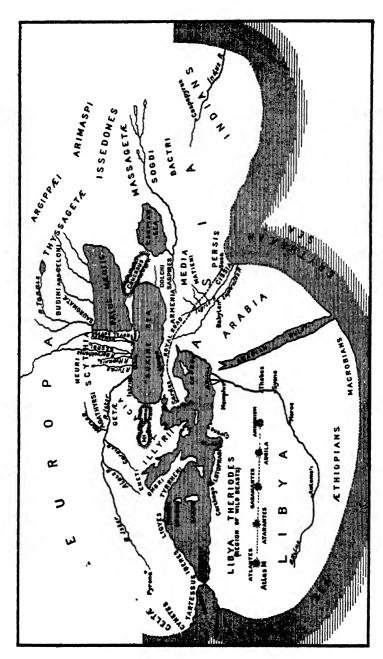
These are weighty objections to the credibility of the story. But in reply we may urge, first, that Herodotus reported the narrative of the voyage as he heard it in Egypt, some 160 years later, when details had been forgotten, except the one astronomical portent on which Phoenician seamen and Egyptian priests would alike lay stress. Secondly, that Necho would probably impose silence on the crews, and trade jealousy would also keep their lips sealed as to their route; for Phoenicians fashioned portents, like Scylla and Charybdis near Messina and the clashing rocks of the Bosphorus, to scare rivals away from routes which they wished to keep closed. Thirdly, the wearisome length of this voyage and the absence of profit might be trusted to deter rivals from copying their example. (Apparently they were deterred.) In all this the Phoenician crews behaved true to type, and evidently Herodotus reported the story truly.

But what shall we say of his scepticism as to the reported position of the sun?—"they declared (I for my part do not believe them, but perhaps others may) that, in sailing round Libya, they had the sun upon their right hand." Now, the word "had" scarcely represents the Greek original, ἔσχον, which means, not "had" continuously, but rather "got," i.e. at the time of doubling South Africa.² Like all Greeks, he believed Africa to be comparatively short, and perhaps not long enough to cause any great difference at the tip in the position of the sun.

His ideas about that continent were curious. He

¹ So too M. Cary and E. H. Warmington, Ancient Explorers, p. 90.

² For my reply to critics of the story, especially Mr. E. J. Webb in the English Historical Rev. of Jan. 1907, see App. I at the end of this volume.



THE WORLD ACCORDING TO HERODOTUS.

himself had not ascended the Nile farther than Elephantine (the First Cataract); and the paucity of his information may be judged by the fact that he believed the Nile to be no longer than the Danube, and yet it traversed the whole of the continent. He also accepted the stories that the districts south of the Nile were uninhabited by reason of the excessive heat, and that the storms of winter (the worst were those of Boreas, the north wind) drove the sun from his usual course into those regions.1 Believing the sun to be a luminary of the northern lands, deflected merely by winter winds towards the sources of the Nile, beyond which all was torrid desert, how could he imagine a southern hemisphere in most of which the sun appeared always in the northern sky? Naturally, then, he could not credit the Phoenicians' story (they were held to be the champion liars of their age) that, in sailing round Africa, they got the sun on their right hand. But his scepticism is of high value, seeing that to nearly all moderns it confirms the old narrative at a crucial point. Equally natural was the disbelief of the Greeks in the Phoenician tale, which was therefore discredited.

The outlook of mankind wholly altered when the Portuguese navigators described the novel position of the sun in the lands beyond the equator. Then at last the scepticism of Herodotus was seen to furnish the best proof of the truthfulness of the Phoenician seamen. Then, too, the chief reason for doubting whether they had circumnavigated Africa vanished. And did not the vivid searchlight thus brought to bear on the southern world strengthen the resolve of Prince Henry the Navigator to struggle on and find a way into the Indian Ocean?

Apart from Herodotus, there are no references to the Necho expedition. In fact, the ancients seem to have ignored that effort, probably because it was very lengthy, and also opened up no new sources for gold, balm,

¹ Herod., Bk. II, Chaps. 24, 25, 29-31.

incense or unguents. The gold supplies of the Mozambique Province and of South Africa are situated too far from the sea to be accessible in a coasting voyage except by a lengthy and dangerous expedition inland. The notion that the famous Zimbabwe ruins were the work of Phoenicians or their contemporaries has long been dismissed as a wild conjecture.

Further, only one or two species known as balsamo-dendron extend as far south as the present Union of South Africa, and these were not used by natives as sources of balm or aromatic resin; also the aromatic shrubs of South Africa do not extend far to the north, besides which "they are mainly oil-producing, and, although strongly scented, would have no particular embalming value." For these reasons it would be natural for the whole voyage to be passed over as a fruitless effort.

The peninsular form of Africa receives no support from the wild statements of Pliny as to the Carthaginian Hanno exploring its circumference,² or his discovering the coasts from Gades to the utmost verge of Arabia.³ Polybius, with his usual care, expressed doubt whether Africa were surrounded by the sea or extended continuously southward.⁴ And the Egyptian cartographer, Claudius Ptolemy, actually bent round the southern extremity eastwards and then northwards so as to join the south-east of Asia, thus making the Indian Ocean a lake. It is well, then, that the account of Herodotus can now be shown to rest on a firm basis, far firmer than he himself deemed possible.

Accordingly, we may sum up the direct evidence about the Phoenician circumnavigation as follows. At first sight the account given by Herodotus seems

¹ These details I owe to Dr. Harold Compton, Professor of Botany in the University of Cape Town.

² Pliny, Natural History, V, Chap. 1. As Hanno's voyage was about 500 B.C. it does not concern us here.

³ Ibid., II, Chap. 67.

⁴ Polybius, III, 4.

invalidated by his rejection of an essential detail, that about the position of the sun; but on further examination his scepticism serves to confirm the whole story. As a problem of evidence the case is unique.

In contrast to the thinness of the direct evidence is the variety and extent of the indirect evidence. First, note the continuation of the statement of Herodotus quoted above. In describing the unsuccessful effort of Sataspes to circumnavigate Africa in the contrary direction, he begins thus:—"But afterwards there are the Carthaginians who affirm it." Affirm what? They are generally assumed to affirm that they had circumnavigated Africa. But the words and the context imply merely that Africa was circumnavigable. Clearly, the Carthaginians believed that. Further, the mother of that villain, Sataspes, also believed that it could be circumnavigated; because, when her son was condemned to death for a heinous crime, she begged that his life might be spared if he circumnavigated Africa. clearly believed that the task, though very difficult, could be accomplished. Consequently, there must have been a prevalent belief as to its possibility; and that belief could have been derived only from the Phoenician source which we are considering.

Another argument in favour of the Phoenician circumnavigation is to be found in the character of the Egyptian King, Necho, who ordered it. He was an ambitious man, who evidently prided himself on his fleets and his naval activities. True, he gave up the reconstruction of the ship canal between the lower Nile and the Gulf of Suez because an oracle warned him that he was working on behalf of an enemy, obviously the powerful King of Babylon. Now, an ambitious ruler who has to abandon a mighty scheme generally tries to cloak the rebuff by a spectacular move in another direction. What more natural than that he should

¹ So Sir E. Bunbury, History of Ancient Geography, I, 297. See below App. I.

seek to win fame by despatching some of his Red Sea ships to round the unknown land to the South?

Besides, in the South there was believed to be abundance of gold, balm and cosmetics, which would enable him both to cope with the Babylonian power and to satisfy the priests and the ladies of his Court. So politics, religion, and fashion all impelled him to some such effort, which, as we have seen, had taken place 900 years earlier. In that interval would not seamanship have made considerable progress?

As to the food problem (always acute in the days of small ships), Herodotus stated that, in the autumn, "wherever they might happen to be," they went ashore, sowed a tract of land, waited for the harvest and then sailed on. Doubtless they waited until one of their frequent nightly landings showed them conditions favourable for cultivation. In the tropics the season mattered less, but the local conditions mattered far more. Also it is well to remember that the coasts of Africa present few waterless stretches except in part of Somaliland, the districts on either side of the Orange River, and the coasts of the Sahara. As a whole, then, that continent is the most favourable of all for circumnavigation.

Further, it is unreasonable to assume that these picked Phoenician seamen were mere tyros, unable to endure thirst or fatigue, ignorant of the devices needed for self-preservation, nonplussed by the change of seasons, or decimated by malaria, wild beasts and savages. Of course if the wind freshened threateningly they would make for the shore and haul their ships up. To this they were trained at home; for they had only two harbours—and those poor ones—on an open shore. (An American scholar counted sixteen ancient deserted

¹ E. J. Webb, *loc. cit.*, p. 8. Admiral Ballard informs me that crews of the slave dhows sailing from the East African coast to the Persian Gulf could at need subsist, even for many days, on the dew which they wrung from the awnings of their vessels.

sites of settlements on the open coast between Tyre and Sidon.)¹ Danger there was from rocks, shoals and the "Cape south-easters," but crews accustomed to face risks generally survived. Why should we deem it incredible that at least one or two of the Phoenician ships should reach home, when they had to face, not vast spaces of open and often stormy seas, but a coasting voyage in generally calm waters (the tropics are nearly always calm) along the easiest shores of any continent?

Here we touch on questions of winds and currents along the coasts of Africa. The winds are fairly steady in the Indian Ocean, and steadiness of wind is a great gain to seamen, especially in the days of small vessels propelled chiefly by oars. From Cape Guardafui to Zanzibar the north-east monsoon prevails from December to March. Winds then turn to east in March to April, to south or south-west in June to July, and later in the year range from south to south-east and south-west. The currents are determined largely by these regular winds, but between Madagascar and the mainland the chief current runs south. Off the Zambesi and Natal, this Mozambique current flows towards the south-west. and further south it is continued in the Agulhas Current, verging westwards. Past the Cape of Good Hope one soon enters into the far-stretching Benguela Current flowing towards the north-north-west, whither the trade winds also trend. Thus winds and currents render it far easier to circumnavigate from the Indian Ocean to the Atlantic than the other way about. The Phoenicians confronted far fewer difficulties than those which befell the Portuguese pioneers 2000 years later.

It would be natural, then, for Necho's expedition to start early in the autumn, after the fierce heats of the Red Sea were past.² Probably the fleet would reach

¹ W. M. Thompson, The Land and the Book (1865), p. 100.

² I differ from Major J. Rennell (Geographl. System of Herodotus, Chaps. 24, 25), who places their departure from Suez or Kosseir, in July, the time of torrid heat!

Cape Guardafui late in the year, that is, before the northeast monsoon sets in. That cape is a difficult one, but it was known to Phoenician and Arab seamen, and, before that monsoon, they ought to pass it without damage. Then they would soon have favouring winds for two or three months, followed by east winds for two more months. The ships should be well through the equatorial zone before the southerly winds set in. The crews would probably land in June at some well-watered place (perhaps about Delagoa Bay) and there sow and await the harvest, which they would reap by November. Thenceforth the winds are variable; but the ships should benefit by the southerly Mozambique current, continued in the Agulhas current, and therefore make good progress as far as False Bay. If they had reasonably good luck they would reach it about January, in the calm season.

Mariners in small vessels having one low mast are certain to believe False Bay to be a strait; for, as they approach it from the east, the flats east of the Table Mountain range are not visible. Indeed (as I am informed on high authority) it is quite possible that, 2500 years ago, the Cape Flats were mostly under the sea. An interesting problem here calls for investigation by geologists. The evidence at present available "does not forbid the supposition that, at that time, the Cape Peninsula was an island." If that were the case, the Phoenicians would escape the most risky bit of navigation of the whole voyage, viz. that of the Cape of Good Hope; or, if the Cape Flats were not everywhere submerged deep enough for them to get through, the crews would probably cut a navigable channel, just as Xerxes did through the Mount Athos Peninsula with the skilled help of his Phoenician contingent.2

Quitting the sphere of speculation, we note that, unless

¹ Note also that the Dutch voyager Linschoten (see Chap. 6) in his *Itinerarium* (published in 1596) shows in his map of Africa a through waterway from False Bay to Table Bay.

^{*} Herod., II, Chaps. 22, 23.

a south-easter blows in, sailors from the Indian Ocean making for the Atlantic have no overwhelming difficulties. The strong current is in their favour, and the wind not long dead ahead, also the shore is not without coves and watering places. Later seamen nearly always did good times in voyaging from the Indian Ocean to the Atlantic. Thus, Sir James Lancaster in his return voyage from the East Indies set sail from Point de Galle in Ceylon on 8th December, 1592, but, despite an unusually long halt of five weeks in Delagoa Bay owing to contrary winds, doubled the Cape of Good Hope on 31st March, 1593. Also Anson covered the space from the southwest of Java to Table Bay in sixty days; and other quick voyages in that direction might be cited; but rarely in the contrary direction.

Voyagers up the west coast of Africa are helped by the prevalent southerly wind and current, and generally made good times as far as the Bight of Guinea, the latter part of that stage being off well-watered lands abounding The western trend of the coast would thenceforth offer more difficulties; for the prevalent winds and current would be contrary, and the surf heavy. It would be natural for the Phoenicians to rest, sow the corn and wait for the (second) harvest at some favourable site along the Gold Coast or Ivory Coast. Given good local conditions (and by this time the crews are inured to the tropics), the rest would help them to stand the strain of what would be the hardest stage of the voyage, viz. that between Capes Verd and Spartel; for here the current and the prevalent winds are unfavourable, and the coasts of the Sahara are arid and waste. Indeed, Admiral Ballard assures me that that stage would take six months' rowing. On the other hand, the supply of fish is unfailing, and sailors accustomed to the Red Sea would not necessarily die of thirst even off the Sahara. Doubtless the weakest would succumb, but probably the strongest would win through on the best of the ships. Even if only one ship of the original flotilla survived, the feat of

circumnavigating Africa would have been accomplished; for when Gades was reached, Phoenician seamen would be available during the last stage along the Mediterranean.

To sum up. Though the direct evidence as to this alleged circumnavigation is slender, yet, on examination it proves to be stronger than appears at first sight. the indirect evidence which has been cited seems decidedly to favour the story. Necho had good reasons for wishing Africa to be circumnavigated, and both he and the Phoenicians believed it to be shorter than was really the case. Moreover, the coastal difficulties were far from insuperable to brave and experienced seamen; the prevalent winds and currents were mostly in their favour; and, with reasonable luck, one or two units of the flotilla should survive. That is what happened in later ages to the circumnavigators of the world. of their ships foundered; but generally one survived. Only in the case of the last voyage of the ill-fated La Pérouse was every man drowned. Therefore it seems probable that at least one or two of the number of ships sent by Necho would complete the circumnavigation of Africa—a task formidable only from its length.

Finally, modern critics are apt to forget that primitive man excelled us in toughness and in power to endure privations. The Phoenicians probably equalled the best of the Polynesian seamen; and if these, as we shall see, succeeded in spreading all over the Pacific, from Papua to New Zealand, and perhaps Easter Island, in frail canoes, why should not the crews and ships of Tarshish and Punt have accomplished a coasting voyage which called only for resourcefulness and endurance?

See Appendix I.

CHAPTER III

THE HEBREW AND THE SEA

"Thy providence, O Father, guideth it (the vessel) along, because even in the sea Thou gavest a way, and in the waves a sure path."—(Solomon, *The Book of Wisdom*, Chap. 14).

How is it that in the Bible there are comparatively few references to the great sea near which the Hebrews lived? And how came it that that people early in their history had so few links with the Greeks and other nations beyond its waters? Why do the Sea of Galilee and the Dead Sea almost obscure the sight of the Mediterranean until we come to the age of the Apostles? What were the consequences of this almost land-locked life of the Hebrews? Above all, how did Christianity react to the new state of things which began when the Roman Empire had spread over the whole of the Mediterranean, and reduced Judaea to the level of a small province? These are the chief questions which concern us here.

First, let us try to picture the old life of the Hebrews when they were a secluded but proudly independent people. After escaping from the Egyptian bondage they conquered, and settled in, Palestine. It is a land no bigger than Wales; and, like Wales, it is mountainous, rugged, and bordered by the sea. But, unlike the Welsh, the Hebrews had very little contact with the sea. Only one of their tribes had direct and constant dealings with the Mediterranean; this was half of the small tribe of Dan, which dwelt about mid-way along the great coastal plain from Mount Carmel to Gaza. True, the tribes of Asher, Manasseh, Ephraim, Judah and Simeon nominally extended to the sea; but there are good grounds for

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believing that they were for the most part excluded from it by the Phoenicians on the north and the Philistines on the south.

In all probability the Hebrews occupied the sea coast only in periods when they were powerful and their enemies weak; for there are few references to the tribes on or near the sea having ships of their own. The clearest reference is in the Song of Deborah. In that paean of triumph over the host of Sisera Deborah sings of the valour of the men of Zebulon and Naphtali, and upbraids the tribes Dan and Asher with cowardice. "Dan, why did he remain in ships? Asher sat still at the haven of the sea" (Judges v. 17). The warlike prophetess scorned the men of Dan and Asher for going on with shipping or fishing at that time of supreme crisis on land. And is it not likely that the contempt of the Hebrews for the inaction of these two partly seafaring tribes, while their brethren inland were fighting for dear life, accounts for the aloofness of that people from the sea? They felt their real life to depend on "the hills whence cometh my help."

However we may explain it, the fact is clear that the Hebrews had very little connection with the sea, and even disliked or dreaded it. Here are some instances of their indifference to that element. Though nearly one third of the Hebrew race lived on the wide western slopes of that mountainous land, and saw the evening sun suffuse the Mediterranean with a flame-crimson glory, yet there is no reference in the Psalms to that daily feast of colour, unless perhaps in the verse: "Thou makest the outgoings of the morning and of the evening to rejoice." On the contrary, the feelings which the sight of that great expanse of waters awakened in the Hebrews were mainly those of dread. Perhaps this is but natural in a simple pastoral folk concerned with raising corn and feeding their flocks and herds. That inspired shepherd, David, very rarely refers to the sea. What was it to him or to his sheep? The sun, moon and

stars moved him to adoration of God. But the sea was merely a distant wonder and terror, a sign of the power of Jehovah on His awesome side, as manifested in time of calamity. "Thy waves and thy billows are gone over me," is his cry of trouble or despair; and when God rescues His people it is, as it were, from the depths of the sea. Another psalmist (Ps. xciii) rejoices that the Lord is mightier even "than the mighty waves of the sea." The contrast between the vast sea and the habitable kindly earth, made for the children of men, is often emphasised.

Thus, in that great nature-psalm (civ) the poet praises God for all the beauties of the earth, also for covering part of it with waters like a vesture, and for driving back those waters "to the place which Thou hadst founded for them"; and there they remain, never to cover the earth again. His main theme is of the marvels of the land—its forests, its harvests, the toil of man, even the hunting by wild beasts. All is full of wonder; and in diverse keys, even from lions, the hymn of praise rises to the Creator. But then, in verse 25, the psalmist thinks once more of the sea—"Yonder is the sea, great and wide, wherein are things creeping, innumerable, both small and great beasts. There go the ships: there is Leviathan whom Thou hast formed to take his pastime therein. These wait all upon thee." Clearly the psalmist knew the land well and loved it. As for the sea, he wondered at it from afar. He pictured it as a marvellous creation of God, in which live Leviathan and vast numbers of creeping things-apparently, he peopled it with whales and shell-fish. The ships, too, are a wonder, which he admires from a safe distance.

Far more intimate are the references to ships and seamen in Psalm cvii. But again observe that the keynote of the psalm is thanksgiving for deliverance from perils. The first is that of deliverance from the wilderness: the second is that of rescue from a storm at sea. God raises up a storm, so that the waves mount up

to heaven and go down to the depths: the mariners reel to and fro, and stagger like a drunken man, and are at their wits' end. Then the Lord listens to their cries, and sends a calm, so that they come unto the haven where they would be. These references to the sea perhaps recall personal experiences; but they arouse thoughts of terror; and these feelings are uppermost in Psalms xciii and xcvi, where the mighty breakers of the sea and the roaring of the waves are hailed as signs of the power of Jehovah.

There are few, if any, passages in the Bible which dwell on the beauty of the sea. We look in vain in its pages for anything like the "countless dimpling smile of sea waves" of Aeschylus,1 or the buoyant ecstacy which that sight set throbbing in the verse of Byron, Victor Hugo and Swinburne. But the sea-sense is, I believe, a comparatively modern growth. The ancient Greeks and Romans scarcely felt it; and the Hebrews not at all, except in awesome mood. From Genesis to Revelation the waste of waters seems to suggest thoughts of fear; and St. John, writing in the Isle of Patmos, has a final vision of a new heaven and a new earth; "and the sea is no more" (Rev. xxi. 1). To him, even in his last haven of refuge, that is the element which divides or awakens feelings of fear: and in the perfected world of the future the sea has no place. Herein he differs widely from St. Paul, as will presently appear.

Why this dread of the sea? It haunted the minds of all the ancients; and even we, who have half-conquered that element, are not without fear; for we know that, in its wilder moods, it can overwhelm our mightiest and best found ships. How much more so, then, should the ancients, with their tiny craft and weak oars, shrink from it? But there was another reason. The Hebrews were on bad terms with their neighbours, who were next the sea. A few words about those neighbours, the Philistines and Phoenicians.

¹ Aeschylus, Prometheus, 89, 90.

The Philistines probably came from Crete, and were of Helladic stock, i.e. of the stock which preceded the Hellenic. Certainly they were a civilised people, well armed, well disciplined, and able to fortify and hold great cities like Gaza, Ekron and Gath. Gaza they had captured from Egypt, then beginning her time of decline,1 and it now became the chief Philistine fortress. As the Greeks approached the land of the Israelites through Philistine ports, they called the land by a word which ultimately became "Palestine." For a time these seafaring Philistines carried all before them as against land-locked Israel. Raiding when and where they liked in large bands, they prevailed over the static, ill-organised Hebrews, just as the warlike mobile Norsemen prevailed over the tribal militia of the Anglo-Saxons—a comparison which lack of space compels me merely to adumbrate.

This offshoot of "the Peoples of the Sea," vaunting its fish-god Dagon, finally occupied the great and fertile plain from about Gaza to near Mount Carmel, with a doubtful gap caused by the tribe of Dan. They wellnigh overwhelmed Israel, especially in the time of the Judges and King Saul, when they disarmed and enslaved most of the tribes. During the reigns of David and Solomon the Hebrews defeated the Philistines; but after the great schism that followed on the death of Solomon, the alien sea-folk renewed their raids until Hezekiah finally ended the Philistine danger; or rather it became merged in the greater danger of an Egyptian or Assyrian domination.

Not only along the southern parts of the coastal plain, but also along its northern levels, there was a sea-folk that troubled the Hebrews. The northern menace came from their Semitic cousins, the men of Tyre, Sidon and neighbourhood. It was less terrifying but more insidious; for the men of Tyre and Sidon were not warriors but sea-traders; and in early times the sea was always the abode of lawlessness and greed. Trade

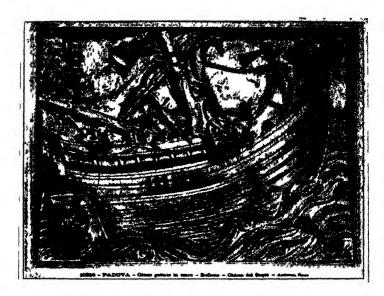
¹ Sayce, A. H., Early Israel and the surrounding Nations, Chap. 2.

and piracy went hand in hand. A great authority on the ancient world thus describes their Jekyll and Hyde dualism:—"It is hard to say whether they were as much merchants as pirates—indeed, they hardly knew themselves—and their peaceful or warlike attitude towards vessels which they encountered on the seas, or towards the people whose countries they frequented, was probably determined by the circumstances of the moment.'1 Yes, the trader might at any time turn kidnapper. Or, again, the crews of three or four merchantmen banding together might plunder any village near the shore and sell the inhabitants into slavery. Accordingly, the coastline was generally deserted except at fortified points. And not finding any naturally strong sites along their coast, the Hebrews shunned the sea lest they should be carried off by hostile fleets, gangs of pirates, or even by tricky traders.² Ezekiel, in his declamation against Tyre, says that her sons "traded the persons of men," and that the city had a slave market.

The Phoenicians and Jews were not always on bad terms. During the reign of Hiram, King of Tyre, there was friendship between him and Solomon; for Solomon was not only powerful, but a good customer. He paid the Tyrians well for cutting down great cedars of Lebanon and carrying them on floats to some port near Jerusalem, there to be used for the great new temple and for his own palace. Apparently, Jewish ships could not tow floats of timber, in fact, we never hear of Jews making long voyages. The sole exception in Old Testament times was Jonah, and he fled from a Godappointed mission to Nineveh and tried to escape beyond the power of Jehovah by embarking in a ship of Tarshish and seeking that unknown bourne, as if he would realise the far nobler dream of the psalmist:

¹ Maspéro, The Struggle of the Nations (2nd Ed.), p. 195.

² We very rarely hear of Jewish ships until the Hellenistic period, shortly before the Roman conquest. Then Josephus (III, Chap. 9) speaks of Jewish privateers at Joppa.



THE JACTATION OF JONAH

"If I take the wings of the morning (the east wind) and fly into the uttermost parts of the sea." His jactation by the indignant Phoenician crew has often been depicted, and never better than in the accompanying scene taken from the church del Santo in Padua: it shows a ship of A.D. 1484 with the rearmast broken off short and the top of the foremast sharing the fate of Jonah.¹

When the Jewish conquests extended to the north of the Red Sea, the Jewish-Phoenician alliance availed to break the Egyptian monopoly in those waters. Solomon, as we have seen, used the ships which the Phoenicians had in the Red Sea to fetch gold of Ophir and incense, ivory, apes and peacocks. After that time of prosperity came the break up of his kingdom; and then, apparently, the Phoenicians resumed their bad habits. So we may infer from the utterances of the prophets against them. Isaiah included these ships of Tarshish among the proud and lofty works of man that Jehovah would bring low.2 Ezekiel also denounced Tyre; she was a merchant for many isles (those of Greece): she traded in blue and purple linen, also in the fabrics, gems and spices of the East. "The ships of Tarshish did sing of thee in thy market; and thou wast replenished and made very glorious in the midst of the seas." But the doom was at hand-"The east wind hath broken thee in the midst of the seas"--"thou shalt be a terror and never shalt be any more."3 These chapters vibrate with moral indignation against the greedy and unscrupulous Tyrians and Sidonians. And doubtless a high moral standard was more attainable under the pastoral conditions of Hebrew life than amidst the often demoralising ways of sea-traders. Greek writers agreed with Ezekiel in reprobating the crafty, cunning ways of the Phoenicians,4 who seem to have contracted all the worst habits of ancient seafarers.

¹ Mariner's Mirror, XVII., p. 339. ² Isaiah ii. 16. ³ Ezekiel xxvi., xxvii.

⁴ E.g. Homer, Odyssey, XV, 415-22; Herodotus, I, 1-2.

As for their religion, it was a sensual and cruel form of polytheism. They deified the forms of Nature, worshipping the sun, the moon and five planets; but they also worshipped the powers of reproduction. Their goddess, Ashtaroth was a hyper-sensuous Venus, in whose service prostitution had a definite place. great crises they would even burn their children on the high places of Baal (see Jeremiah xxx. 5); and they practised other cruel rites which they probably picked up from savage tribes in the course of their voyages. Often the Phoenician and Canaanitish religion ensnared the Israelites, perhaps because the lofty monotheism of the Hebrews tended to weary them, while the sensuous Phoenician rites attracted the lower and baser sort among the Hebrews. Even Solomon in his old age was tempted to worship Ashtaroth, though he continued, strange to say, to worship Jehovah. Naturally, then, Ezekiel foretold the downfall of luxurious soul-destroying Tyre and Sidon. Tyre narrowly escaped destruction at the hands of Nebuchadnezzar, and was laid waste by Alexander the Great in 332 B.C. Thereafter her influence on the Hebrews was negligible; and their chief danger arose from their being on the high road between Egypt and Assyria or Babylon. Professor Burkitt has well likened Palestine to a bridge between those two Empires.1 Consequently her interests became more than ever those of the land, not of the sea.

The exile of the Jews in Babylon made them still more a landlocked people. There is an interesting passage in Isaiah (xxxiii. 20-2), where the prophet foretells the return from exile to Jerusalem and the restoration of their religion. "There the glorious Lord will be unto us a place of broad rivers and streams wherein shall go no galley with oars, neither shall gallant ship pass by." So, in this vision of a restored and prosperous Jerusalem, there is to be a flood of wealth and happiness, the simile being taken from that of the

¹ Palestine in General History, p. 88.

River Euphrates. But on it (says the prophet, by an afterthought) there will be no ship, and no galley with oars; for on such ships or galleys at Babylon Hebrews had plied the oars and worked the sails and tackle. Thus, to the Hebrews, even the river boats became associated with the terrible toil at the oar.

We must now pass on to survey in broad outline the mighty change brought about by the founding of the Roman Empire. That event had immense results in the sphere of politics, society and commerce; but its implications in the spiritual sphere were, if possible, even greater, though less obvious. For it coincided with no less an event than the rise of Christianity.¹

It is not wise to make too much of the political and material aids to religion; for religion transcends the political and the material. Yet undoubtedly external events made for, or impeded, the progress of the faith. The Roman Empire was founded in the year 29 B.C., Augustus Caesar then becoming princeps ("Emperor" was the later title)—an event which brought peace to a distracted and despairing world. Milton saw in it a preparation for the advent of the Prince of Peace; witness this noble stanza in the "Hymn on the Morning of Christ's Nativity":—

"No war or battle's sound
Was heard the world around:
The idle spear and shield were high uphung.
The hooked chariot stood
Unstained with hostile blood;
The trumpet spake not to the armed throng,
And Kings sat still with awful eye
As if they surely knew their sovran Lord was by."

But the Pax Romana was even more significant at sea than on land. After the Battle of Actium (31 B.C.) Augustus enforced not only maritime peace but maritime

¹ For a fuller account see Dr. T. R. Glover's book, The Jesus of History, Chap. IX: or his more recent work—The Influence of Christ in the Ancient World (Camb., 1929).

order, and during his long and beneficent reign the imperial fleets stamped out that age-long curse, piracy. One fleet was based on Alexandria, another on Seleucia, the port of Antioch; and a third on the Isle of Karpathos, near Rhodes. Thus, the corn supplies from Egypt and Syria, on which Rome depended for her bread, were thoroughly guarded; and this vital fact, the corner stone of imperial policy, made the Mediterranean, for the first time in human history, safe for trade; witness the inscription on a tomb that the Phrygian merchant buried there had voyaged to Rome seventy-two times¹—a number which is incredible unless the outward and return voyages were reckoned as two.¹ Not unimportant also is the fact that in A.D. 41 the dynasty of the Herods ended, and Palestine became outright a Roman province.

What was the attitude of the early Christians at Jerusalem, Antioch and elsewhere in the East to these changes? They did not oppose them. On the contrary, they even availed themselves of the new facilities for travel which Roman fleets and Roman law opened out. Loyalty to Christ impelled them to do so; for was not one of his last and most urgent commands "Go ye therefore, and teach all nations."2 In face of this imperative order it is strange to find some of the apostles, even Peter, doubting for a time whether the gospel was intended for the Gentiles. The one who felt the wider call most keenly was the former persecutor, Saul, thenceforth Paul, of Tarsus. After his conversion, no doubt lurked in that fiery soul, but the conviction gripped him that he was entrusted with "the gospel of the uncircumcision" (i.e. of the Gentile world). On so fundamental an issue he withstood Peter and the other doubters. They might preach the gospel only to "the circumcision": he would preach it to all the world.3

In this conception of his mission (far wider than that

¹ Quoted by Harnack, Expansion of Christianity, I, 21 n. from Zahn, Weltwerkehr und Kirche.

Matthew xxviii. 19. Galatians i., ii.

hitherto held by the Church at Jerusalem) may we not detect the broadening influence of his upbringing in a Roman "colonia"? His birthplace, the great city of Tarsus, was one of the meeting places of the East and West. A prosperous port, not far from the ancient mouth of the River Cydnus, it distributed produce throughout Asia Minor and was thronged with seamen and merchants. As a centre of culture no less than of commerce, it realised the dream of Alexander the Great, of linking the Greek with the Asiatic world. As has been forcibly argued, "his (Paul's) mind had been widened far beyond the narrow limits of the stereotyped Judaism." Therefore, the command to preach the gospel to all the world appealed to him more powerfully than to the apostles who had been reared in the centre of a self-sufficing Judaism. Very natural was his joy at the prospect of a world-wide Christian crusade.2

Nevertheless, the extension of his second missionary journey to Europe was in the last resort due to the vision which came to him by night at the port of Troas. man of Macedonia appeared praying him to come over and help.3 The vision dispelled any doubt that may have remained in Paul's mind. And so from a coast long ago deluged with Greek and Trojan blood there set forth the first Christian mission to the Continent of No voyagers from Asia to Europe ever set forth with less parade. Yet the vast armada of Xerxes had far less influence on human destinies than the single ship which bore Paul, Silas and Timothy to Neapolis, near Philippi. Paul's interest in all things Greek carried him on to Thessalonica and Corinth; and his later activities were to centre chiefly there and at other ports of the Aegean. Meanwhile, the outlook of Peter had undergone a miraculous widening. In his case also the vision, which led to a notable extension of Christian missions, befell him at a port, Caesarea. Is it too much

¹ Sir W. Ramsay, The Cities of St. Paul, p. 78.

Acts x., xi., xv.

^{*} Acts xvi. 9.

to say that Troas and Caesarea were the two eyes of faith for Asia, looking out seawards and westwards? Thenceforth Christianity could not restrict its activities to Palestine or even Asia. Its call was world-wide.

And with the call there came new and unequalled opportunities. Rome, as we have seen, had at last cleared the Mediterranean of pirates; and travel by sea was safer than by land; such is the testimony of Pliny the Younger. Paul in his voyagings over the Ægean must have heard that the whole of that great sea was now safe for travel; and his missionary policy therefore trended more and more westwards. When the Church at Jerusalem also welcomed the change, the days were gone when the new faith was limited to Palestine, Syria and Asia Minor. No longer was there a fear of the "Judaisers" localising missions. These now began to spread over the Mediterranean world; for Imperial Rome encouraged travel over its expanse, placing fewer official restrictions than rampant nationalism imposes to-day. Very characteristic of the age of the Pax Romana and of the bold forward policy of St. Paul is his statement, in the letter written at Corinth in A.D. 56 to the Romans, that he proposed to come to Rome and thence proceed to Spain¹—a plan which would involve a voyage from Ostia to Tarraco. How different the future of the world might have been if he had been able to make Spain, not Rome, his chief objective.

His last voyage, leading to the shipwreck at Malta (probably his fourth shipwreck) abounds in interesting details, which will be reviewed in the following chapter. Here I have sketched only in outline the astounding change which came over human life, especially in Palestine, early in the Christian era. That land was then no longer separated from the world; for it was swept into the vast net of the Roman Empire; and the Jews now had to decide whether they would participate in the wonderful benefits of that Empire. Most of them

¹ Romans xv. 24.

refused. They preferred to cling to their old faith, which was, in effect, an exclusive faith. Finally, in A.D. 67, they rose against the might of Rome and were soon crushed by Vespasian and Titus.

Very different was the attitude of the apostles, especially St. Paul. He, born a Roman citizen, often made use of the privileges of that citizenship, and used to the full the new opportunities for travel which Rome had opened out over the Mediterranean; for with the eye of faith he discerned a future in which Christianity would spread over its shores and permeate even pagan Rome. His acceptance of her sway¹ was surely wiser than the stubborn opposition of the Jews, based on the old exclusiveness. In short, whereas they had regarded the sea as an unfriendly element, it now became to the apostles a wondrous help in spreading the gospel over the Mediterranean world. Under the Caesars that cradle of the ancient civilisations had become a political unit. In the apostolic age it attained to spiritual unity.

¹ In saying this, I do not forget that Paul and the other apostles always opposed her pagan creed, especially its novel annex which required worship of the Emperor.

CHAPTER IV

THE SHIP—ANCIENT AND MEDIEVAL

"The greedy sea is death to sailors."—(Horace, Odes, I, 28.)

"Man would lose half his inheritance, if the art of navigation did not enable him to manage this untamed Beast, and, with the bridle of the winds and saddle of his shipping, to make him serviceable. The sea is . . . the uniter by traffique of all nations."—(Purchas, Pilgrims, I, § 6.)

All who ponder on the really formative events of history find no question more piquant than that of the age-long inertia of early man in exploring the coasts of the oceans, by contrast with the rapid discovery of the world which ensued between the efforts of Columbus and Cook. Only 267 years elapsed from the time when the great Genoese sighted one of the Bahamas to that in which the great Englishman fell under the clubs of Hawaiians. But nearly 3000 years divide the first clearly recorded expedition by sea, that sent by the Egyptian queen Hatshepsut to the coasts of Punt, and the arrival of Vasco da Gama from the Atlantic on neighbouring coasts. These figures give some idea of the stationary character of ancient and medieval navigation, and of the rapid advance achieved from the fifteenth to the eighteenth century. Equally striking is the contrast between the static civilisation of the former age and the rapid transformations due in large measure to man's increasing mastery of the oceans.

For the best of all material aids to, and measures of, the progress of mankind is supplied by the ship. In this chapter I shall try to outline the chief naval developments from the age of Vergil to that of Columbus; also very briefly to estimate their effect on the advance of civilisation. Perhaps the most telling way of pointing the contrasts will be that of describing some voyages typical

of ancient, medieval and comparatively modern times; for these will suggest the varied ways in which man's life has been influenced by the wider contacts resulting from the improvements in that world-ferry, the ship.

The plate of an Egyptian sea-going ship of about 1500 B.C. (see page 21) shows it as of about 60 feet in length, comparatively narrow, of slight draught, with one mast carrying a large square sail, which was used only when the wind was behind them. About thirty rowers provided the chief means of propulsion; and a warship carried four top-men and about a dozen soldiers, besides two to four steersmen (one to each steering paddle), a look-out man and a sounding man forward, and a few slaves. This craft, differing little from a river boat, was designed primarily for offence, not for trade. But in the course of centuries the carrying capacity and seaworthiness of all ships increased greatly. Indeed, the growth of trade necessitated the growth of the ship, which in turn stimulated intercourse by sea.

It is a far cry from the cramped cabinless Egyptian craft to the later "ship of Tarshish" in which Jonah set forth from Joppa to flee thither from the presence of the Lord. Probably he is the first recorded sea passenger but, as "he paid the fare thereof," travel by sea must by that time have been indulged in on urgent occasions such as this. There was some shelter aboard; for in the ensuing mighty tempest, fit to break the ship asunder, Jonah "went down into the sides of the ship, and he lay and was fast asleep." Meanwhile the crew "rowed hard to bring it to the land, but they could not." Thus, the gale was from off the land, and their merchantship was too heavy for the rowers to propel it thither against the wind. No wonder that they turned against that suspicious runaway from the land and cast him overboard. (See plate facing p. 42).

For well-nigh a thousand years the "ships of Tarshish" plied their tasks up and down the Mediterranean to

¹ Jonah i.

and from Gades; but the singular voyage of Jonah is, I believe, the only truly human document which has survived from all the toilsome seafaring of the secretive Phoenicians. And the sole bill of lading is the brief statement, already referred to, that once in three years the ships of Tarshish brought back gold and silver, ivory and apes and peacocks to Eziongeber for Solomon. The canal cut by Egyptian Kings between the lower Nile and the Red Sea then enabled Phoenician and other Mediterranean ships to reach southern waters; but it became blocked before the time of Necho, and, later,

was so permanently.

Such, in outline, is the all too dim sketch of the human side of ancient voyaging before the time when Greeks, Carthaginians and Romans widened its sphere and therefore perforce enlarged their ships. For war Carthage invented the quinquereme, and she must have had improved ships of Tarshish; for during the First Punic War she succeeded in transporting 140 elephants to Sicily; but how that feat was accomplished no writer explained. Why did the sea always check the narrative flow of Livy and Polybius? We know little as to how merchandise was embarked, stowed away, and landed. But we can be sure that, so soon as the shippers of Tyre and Sidon imported tin and silver from Tarshish, they must have widened and deepened their ships so as to cope with the dreaded easterly gales. Also Horace's "gusty tyrant of restless Hadria" must early have compelled the importers of Baltic amber, etc., to improve the ships that brought those precious cargoes down the Adriatic to Greece and the Levant. But we have no record of those efforts, or of an Adriatic storm, even from that sea-sick poet. Half in jest, half in disgust, he jerks aside those "channel crossings." But, for him, the sea is tumultuous, greedy for the lives and wealth of men; and he likens a labouring State to a storm-tossed bark.1

¹ Horace, Odes, I, 3, 14, 28; II, 14; III, 3, 29.

Clearly Vergil loved the sea; for in the Aeneid he describes vividly its changing moods and the dangers that beset Aeneas and his twenty ships. But even he fails in that elaborate effort to depict the mighty storm which burst upon them as they neared the coast of Carthage. His tempest will convince no seaman.—Jealous Juno bribes uxorious Aeolus to let loose the winds from his cave upon the weary crews of Aeneas as they near Cape Bon. Forthwith, all together, East, West and South-West sweep down on the flotilla; and then, as the pious chieftain prays to heaven and the battered craft fly northwards, down rushes the tyrannous North. At once the blast strikes the bellying sails full in front and tears them; the lashed billows rise sky-high and smash the oars. "Then (moans Vergil) the prow swings round and exposes the broadside to the waves; a sheer mountainous crest of water rushes on." That should overwhelm all the twenty shattered, sailless, oarless craft; for they are all in the same dire extremity. No! Somehow, only one is sunk, and that by a wave which "poops" her. Others are dashed on to a reef or into the Syrtis quicksands. But now awakening Neptune resumes his sway; at once he stills the waves, raises by his trident three wrecks from the reef, opens out the quicksands for three others; and soon nineteen ships creep to shore near Carthage. Did Boreas ever deal so mercifully with nineteen out of twenty ships which all presented their broadsides to him?

No wonder that Lucian, that cosmopolitan satirist of the mid-second century of the Roman Empire, made good sport with sea stories in his *Marine Deiries*, and in *True History*. The latter ("containing nothing but lies") describes a voyage of exploration of the Western Ocean, in which, after eighty days, the ship is carried by a whirlwind to the moon, there makes war on the "sunites," descends to the Atlantic, is swallowed by the sea serpent,

¹ See an overstrained eulogy—"Vergil, Poet of the Sea," by Prof. T. C. Giannini in *Mariner's Mirror* (July, 1934).

and escapes through the monster's teeth; whereupon all ends happily among heroic spirits in the "Fortunate Isles" (the Canaries).

Meanwhile there had appeared an account of a storm and shipwreck which has aroused the admiration of every seaman, including Nelson. We owe it to the keen interest which St. Luke took in the apostolic work of St. Paul, added to which "the beloved physician" was inspired to show forth in exact detail the last and worst shipwreck which befell "the apostle to the Gentiles." As the narrative in Acts xxvii. is the only full and convincing account of a voyage and shipwreck that has come down to us from classical times, it deserves careful notice, especially as those fourteen days of testing reveal the defects of the great Alexandrian grain ships, on which Rome mainly depended for her supply of bread.¹

The first ship, on which St. Paul embarked at Caesarea, in the summer of A.D. 61, was a small coaster, having on board other prisoners destined for Rome, under the charge of Julius, a centurion of the Augustan band, who decided all important questions during the voyage. He ordered the trans-shipment of Paul and the other prisoners to a great Alexandrian grain ship which, owing to a spell of westerly winds, had put in at Myra, a port of Lycia. It now contained 276 persons. Julius ever treated Paul with great consideration, for the apostle had appealed unto Caesar, and was not, like most prisoners, destined to be thrown to the lions. How terrible the lot of such prisoners could be on shipboard appears from the Epistles of St. Ignatius, Bishop of Antioch, who thus described his voyage: "From Syria to Rome I am fighting with wild beasts by land and sea, by night and day, bound to ten leopards, that is, a company of soldiers, whose usage grows still harsher when they are liberally treated. Yet through their doings

² See my Mediterranean in the Ancient World (Camb., 2nd Ed., 1934) for a reproduction of one of these ships, also an account of them.

I am more truly learning discipleship." Seemingly, the soldiers hoped by means of greater harshness to extort larger bribes from the friends of the bishop. Very different was the condition of Paul; for, when a northerly wind drove them to the south of Crete, Julius permitted him to "admonish them" to winter there. But because Fair Havens "was not commodious to winter in, the more part advised to put to sea from thence, if by any means they could reach Phoenix and winter there, which is a haven of Crete looking north-east and south-east."2 Seeing that the captains and masters of the imperial corn ships were subject to strict rules, this one would suffer if he did not make all reasonable effort to push on. Besides Phoenix, about forty miles farther west, was one of the recognised wintering stations for the Imperial corn ships; and Fair Havens was open to Euroclydon (east-north-east wind) though well protected by islands. Thus the question at issue was doubtful.8

The fears of St. Paul were justified by Euroclydon bursting on them as they sailed along the south coast. "The ship was caught and could not face the wind; we gave way to it and were driven. And, running under the lee of a a small island called Cauda (or Clauda) we were able with difficulty to secure the boat." Thus, the great corn ships could not face a gale; they were too large and bulky for oars, though possibly in a calm the boat sent ahead could tow them very slowly. They carried one great mast with a yard supporting a huge square sail; but this was far too big and heavy to be hoisted in a gale; and it was not suitable for tacking in a high wind; its small triangular topsail was also then useless. At the bow was a high-sloping bowsprit, from which hung a small square sail, called artemon (=hanger), which served to keep the ship's head before

¹ The Epistles of St. Ignatius (edited by J. H. Srawley), II, pp. 12, 13.

² I.e. it faces due east. See the map in James Smith's Voyage of St. Paul, p. 90.

³ Ibid., 80-91, 259-70, with plans of the two havens.

a following wind. This was the sail, mistranslated "mainsail" in the Authorised Version (Acts xxvii. 40), and correctly rendered "foresail" in the Revised Version; for indeed it did act like, and perhaps even suggested, the later foresail. Probably it was used, during the fourteen days of driving before the wind, to enable the steerers to direct the ship somewhat to the right of her natural course; for Euroclydon would otherwise have driven her west-south-west, right in to the dreaded Syrtis quicksands. Thus, the great ship was nearly helpless in a gale, and only the "hanger" saved her both from the Syrtis and from falling into the trough of the waves. Also, she had only one boat. To save space it was generally towed astern. But, when Euroclydon caught them in the open, the boat was probably nearly swamped by the waves; and only when they were in calm water under the lee of Clauda, could it be hoisted aboard by the combined efforts of crew and prisoners. There it was worse than useless; for in case of foundering how could one boat save 276 people? Therefore, naturally enough, when they neared land the sailors tried to make off secretly in the boat, but Paul reported their treachery to the centurion, who ordered the soldiers to cut the ropes of the boat, and it fell away.

Yet the great Alexandrian was not a bad specimen of her class; she had chains for undergirding the hull to prevent the seams opening; she carried more than four anchors, and the seamen were skilled to lower the gear (i.e. make the ship snug aloft), and on the third day of the tempest to cast out the tackle (probably the huge main-yard), so as to ease the strain on the mast and hull. Finally, by sounding, they could detect their approach to land and devise the means of reaching the nearest bay. All this implies an experienced crew. Slowly, then, she drifted through Adria in gloomy weather during fourteen days which demoralised all but the apostle. In the last terrible night, when they were nearing Malta, he persuaded them to take food



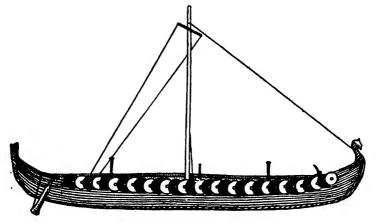
and have courage. So they cut the cables of the four anchors cast out from the stern, and loosed the bands of the two rudders in order to raise them. Then, hoisting the "hanger," they made toward shore and lit upon "a place where two seas met," that is, probably in the bay where an islet causes an inflow from one side and weakens the direct onrush of the waves. Thus, out of the jaws of death they all escaped to land, mainly through the faith and calm courage of a prisoner. After remaining three months in Malta, Paul and his comrades were placed in another corn ship, which had wintered in Malta; and so in the third ship he reached Puteoli, the passenger port of Rome. The whole voyage from Caesarea lasted from about mid-August to mid-February.

Such were the imperial grain ships on which Rome mainly depended for her supplies of corn. During some three centuries no successful effort was made to enable them to beat against a head wind. The accompanying plate, by Dr. Jules Sottas, of Paris, is based on a bas-relief of a portico discovered in the ruins of Portus, near Ostia, the mercantile port of Rome. It shows a grain ship of near A.D. 200, probably named Urbis Lupa: witness the letters and the two shewolves above, with Romulus and Remus. The bird at the stern is the guardian goose—the bird of Isis who was the patron goddess of ships, borrowed from Egyptian mythology. (See the drawing of her on page 19. I owe these details to Dr. Sottas.) Note also the cabin, a windlass, and a pulley.

Perhaps the almost invariably fine weather of the Eastern Mediterranean during half the year relaxed the inventiveness of her seamen; but, however, we may explain the sluggishness of nautical invention in classical times, it certainly contributed to the undoing of imperial Rome. At best she could get her Egyptian supplies only during April to October, and even then was at the

¹ Mariner's Mirror, XXI, p. 146.

shuffling of masses in this or that land area, whereas it promised world dominion. As if baffled by his constant failures at sea, man ceased to record them. After the Greek and Roman age the spirit of adventure, without which things naval wilt, passed to the northern peoples, the Saracens, the Indians and Chinese, who will be referred to later. In the ninth and tenth centuries the Vikings of Scandinavia carry out incredibly daring raids, from the Hebrides to Mediterranean lands.



VIKING SHIP

As will appear in the following chapter, the boldest crews even work their way to Iceland, Greenland and Vinland in open craft, having only one square sail to help the rowers.

Meanwhile the conquests of the Saracens on land had their counterpart in remarkable maritime efforts which carried them far over the Indian Ocean and ensured their supremacy in the Eastern Mediterranean. In this sphere they developed large and efficient warships which compelled Venice, Genoa, and later the Western Powers to copy them. They also voyaged far down the Atlantic coast of North Africa. Indeed

it has lately been claimed that, by A.D. 1250, Arabs had voyaged as far as the Senegal River.¹ They spread the serviceable rumour that the seas beyond were unnavigable owing to blackening heat. However, Moslem exploits secured North Africa permanently, and Spain and Sicily for more than three centuries, while their corsairs ravaged other coasts of South Europe. As my aim in this work is not war but peaceful expansion I can only glance at the vast and little known theme of the navigation and seamanship of Saracens and Arabs, a few details of which will presently be noted. Enough to say here that they long surpassed other Mediterranean seamen and dowered our language with many nautical terms—among them: admiral, arsenal, average (in nautical sense), barque, cable, chebec, felucca, mizen, and several others.

These, along with other results, came to us largely through that world-upheaval, the Crusades, which then brought West and East into fierce but not altogether unfruitful conflict; for the conquering might of Islam hammered European States for a time into a semblance of union. North and South made common cause, and therefore learnt far more about their ships and those of the enemy; hence a spread of nautical knowledge, which probably had more lasting influence on civilisation than any of the military achievements.

As usual, the Crusades have been studied almost exclusively from the landward side. But their naval implications are of high importance. After the frightful loss of life in the overland march to Palestine of the illorganised masses that made up the First Crusade, it was clear that Jerusalem could be won and held only by transporting large bodies of men, both horse and foot, across the Eastern Mediterranean. To this task Venice, Genoa, Pisa, Marseilles and other ports devoted themselves with energy and great profit, the transports

¹ See Mr. G. H. T. Kimble, in Mariner's Mirror, XX, p. 280.

serving afterwards as freighters in the growing trade with the Levant. Once more, then, mastery of that sea was to decide the future of the world. Or rather, the very doubtful mastery of the Christian States doomed the later Crusades to failure.

Here again we may illustrate the theme by a concrete example, the best being that of the voyage of Louis IX of France to the Levant for the Seventh Crusade. That voyage is of interest because the experiences gained in former crusades had borne fruit in certain naval improvements, which are referred to by that entertaining chronicler, the Sieur de Joinville. Knowing little about the sea and ships, he did not assume that everything in a ship was understood by his readers—a fault common with seamen, who as a rule are poor narrators. enough to whet his curiosity and was tactful in satisfying that of his readers. Also his Memoirs, though written in old age, recall vividly many strange happenings. A devoted liege of Louis IX, he followed his example of taking the cross, and, though a poor baron, summoned ten of his knights to go with him overseas, in company with his cousin, the Count of Saarbrück, who also took with him ten knights. These and retainers journeyed in boats down the Saône and Rhone to "Arles the White," and thence reached Marseilles. There the two cousins had hired a ship; and his aged memory recalls a curious scene. "They opened the door of the ship and put therein all the horses we were to take oversea; and then they re-closed the door and caulked it well, as when a cask is sunk in water, because when the ship is on the high seas, all the said door is under water." after the singing of Veni Creator Spiritus by priests, the seamen unfurled the sails, and they stood out to sea (August, 1248).1

For the first mishap we are grateful because they made a procession "round the two masts of the ship"; and we

¹ Memoirs of the Crusades (Villehardouin and Joinville) transl. F. Marzials, p. 167.

thereby learn an important fact, that she was a twomaster. So, though by no means a large transport, her rig excelled that of the usual ship of the ancients; for her two masts steadied each other, and distributed the windstrain over the hull, besides preparing the way for the three masts of the future.

When and where the first two-master was built is not known. As has been suggested above, the foremast may have developed out of the artemon. If so, the later two-master grew out of the Alexandrian corn-ship.

But there seem to be more examples showing the second mast as a mizen, carrying a lateen sail such as had long been common in the Levant. One of the few pictures of two-masters is that shown above facing p. 42, where the fate of Jonah is pictured as occurring on an Italian two-master of A.D. 1484. The top of the foremast, which carries a badly rent square sail, is falling; while the rear mast is going over by the board. The ship is stoutly built with large fixed rudder. Sketches of stone-carved ships in Brittany show that there many experiments were made between one, two, and three masters. All we need note here is that by 1490, the final form for ocean-going ships was a lateen sail on the mizen, and square sails on the main and foremasts, with (later) a sprit sail under the enlarged bowsprit.¹

That ship, having the beginnings of a fore- and aftrig, was a great advance on St. Louis's ships, three-fourths of which were driven away from Cyprus by a stiff sou'-wester "to Acre and other strange lands,"—a sign that they could not beat up against a high wind. After varied adventures in Egypt and Palestine, which do not concern us, Louis IX, his Queen and Joinville embarked for France in April, 1254. During that voyage Joinville (now the Seneschal) noticed what was probably a recent invention, namely, fixed rudders. "In the Marseilles ships (he writes) there are two

¹ For details see Mariner's Mirror, XI, pp. 294-96; R. and R. C. Anderson, The Sailing Ship, pp. 90 ff.

rudders attached to two tillers in such marvellous fashion that you can turn the ship to the right hand or to the left as quickly as you can turn a saddle horse." What this mechanism was is not known; but it is clear that the hand-worked paddles had now been superseded, at least on large ships, by fixed rudders worked by tillers, which of course gave more power to the steerers—a great advantage in heavy seas. The rudder, or rudders, fixed to a straight stern-post, may have been invented by Zerbi, a Genoese, who was rewarded by that Republic.



SEAL OF IPSWICH

But it seems that fixed rudders had already appeared in northern ships; for the seal of Elbing in Prussia, of about the year 1242, shows a ship thus fitted; and that of Wismar in Germany (1256) is similar. The first sure signs of a fixed rudder in English ships occur in the seal of Poole (1325) and in Edward III's "gold

noble" of 1344 commemorating his victory at Sluys.¹ It is needless to point out the importance of the fixed rudder: it increased the power of steering, and, put an end to the double-ended ship, which had hitherto been the general type. Thus, it was one of the changes which made possible the large ship of the future. Obviously, steering by two paddles implies a small vessel.

We may note here also the introduction in northern ships of the sailless bowsprit. It was used at first only for fastening bow-lines further forward than on the stem; and not until later was it used, first for a sprit-sail underneath, like an artemon²; and later still, when prolonged,

¹ See R. and R. C. Anderson, pp. 85-91 for further details.

^{*} See R. and R. C. Anderson, pp. 87, 88, 169,

for staysails from the foremast to it: but this last is to anticipate changes which came in about 1700. Seamen felt their way very slowly to developments which made

possible the full-rigged ship.

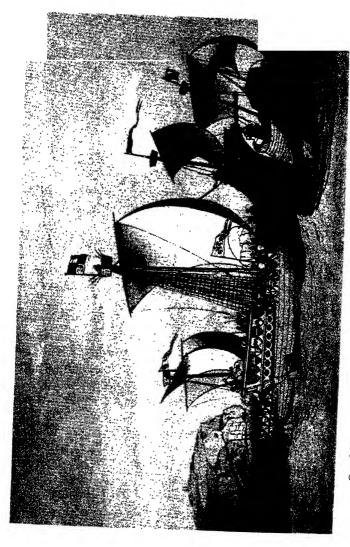
To recur now to the return voyage of St. Louis. During a mist off Cyprus, the royal ship ran aground on a sandbank, whereupon a general panic arose, with much praying and tearing of beards. At once the mariners called to the four galleys, then in company, to come and save the King and Queen-"but (says Joinville) never a galley came near; and in this way they acted wisely; for there were full 800 persons on board, who would have jumped into the galleys and thus have caused them to sink." Fortunately, the ship soon worked off the bank, but, even in calm weather such an accident might have led to the loss of nearly all aboard. Thereupon, at the royal order, four divers dived below and found that four fathoms of the keel had been broken off. Nevertheless, with his usual magnanimity, Louis resolved to go on rather than stay in Cyprus and endanger all their lives in a strange land. His courage was rewarded; for, despite a gale and danger from fire, they reached home safely. The fire occurred at night from one of the Queen's bedwomen leaving the Queen's head-kerchief on the stove where a lighted candle was burning: it set the clothing on fire, but the Queen, awaking, quickly threw it overboard and extinguished the fire. Thereupon Louis ordered Joinville to see that all fires and lights were put out at nightfall, "except the great fire that is in the hold of the ship." Equally noteworthy was the punishment which the King, when off Pantellaria, imposed on six gluttonous youths who had there long delayed the ship and her consorts by feasting ashore. He ordered them to be placed in the big boat towed behind the ship, where they were drenched by the spray—a punishment used for felons.

That the safety and comfort of voyagers, even in the best ships, had advanced little since the apostolic age appears in the realistic doggerel of The Pilgrims' Sea Voyage, which shows them quaking for fear, calling vainly on the steward for hot malmsey or salted toast (meat being out of the question), while the pious tried to read until their heads "wolle cleve in three." The worst came at night:—

"A sak of straw were there ryght good,
For som must lyg them in their hood:
I had as lefe be in the wood
Without mete or drynk.
For when that we shall go to bedde
The pumpe was nygh oure beddes hede,
A man were as good to be dede
As smell thereof the stynk.1

These agonies could last several weeks if the winds were contrary. For not until the end of the crusading age did the urgent need of beating up against head winds lead to a transition, which seems to us obvious enough, from the two-master to the three-master. When the former of these craft (mostly Mediterranean) carried a mainmast with a square sail, it was natural enough, especially in that sea where the lateen sail had long been in use, to add a foremast and mizen mast, the latter fitted with that sail, while the foremast with a square sail would be natural so as to keep the ship's head well before the wind. Again, the place and time of the first three-master is unknown; but in the years 1400-50, the change took place quickly both in south and north. Indeed, no development, except perhaps the adaptation of steam power to ships, has ever proceeded so fast as that of the replacement of one mast, with one large square sail, by three masts carrying five or six sails, which soon led on to the partial adoption of a fore- and aft-rig. these developments lies the secret of man's ability, after long ages of helplessness in face of contrary winds, now at last to beat against them. He knew not the worldimport of this change. But we can now see that thereby

¹ The poem is cited by G. G. Coulton, Social Life in Britain, p. 427.



ONE-MASTER, TWO-MASTER, AND THREE-MASTER (14th or early 15th century)

he achieved the greatest and most enduring of his conquests, that of the oceans.

Further, by the year 1450 the failure of the Crusades and the spread of the Moslem power over all the east and much of the central Mediterranean, threatened to bar the transit of Asiatic produce into Europe except on terms equivalent to blackmail. Naturally enough, then, European traders sought a sea route to the East. Accordingly, the exploration of the South Atlantic now received a vigorous impulse, destined to produce farreaching results both in east and west.

The magnitude of the changes now beginning will be apparent if we note the slow and timid steps achieved before the fifteenth century. Two centuries earlier Venetian and Genoese seamen, with occasional efforts by French, Flemish and English, had crept down the coasts of North-West Africa. To note only the chief landmarks: in 1270 a Genoese pilot, Malocello, rediscovered the Canary Islands (probably the Insulae Fortunatae), which had long been forgotten. Nothing came of this event, probably owing to the weakness of shipping and stagnation of maritime trade, until the year 1341. Then King Diniz of Portugal despatched an expedition, mostly under Italian pilots and officers, which lit on the islands—they are not very far from the African coast-and found the natives ready to barter the produce of that fertile group. The value of this trade, and the desirability of the islands for search along the coast of the mainland led to their acquisition in 1402 by Jean de Béthencourt, and other Norman adventurers, who were fired with the desire to discover the fabled Rio de Oro not far off in Africa. After changing hands several times, the islands passed into the hands of Spain (1476).

These many changes of ownership, with fitful efforts at colonisation, reveal the attractions which adventurers and traders have always felt for islands off a dangerous continental coast; for in it they feel safer from treacherous

attack; and islanders are generally more hospitable than continental peoples to sailors. Hence, Homer, as we have seen, figured a friendly community in the Phaeacian Isle far in the western sea; for there, out of reach of harm, men were kindly, and even a princess would befriend the castaway Odysseus. So, also, Plato in two dialogues described his ideal society, dwelling in the fabled isle Atlantis, far out in that ocean; and even early in the Renaissance (that is, well before the Turkish conquest of Constantinople), students of Greek literature began to look longingly away from the wreckage of all crusading schemes to a new Atlantis, only the outlying islets of which had as yet been seen by sailors in the Canaries and the lately found Madeiras (1416). Thus, the study of Homer and Plato helped to quicken the occidental quest; and the manly curiosity of Odysseus lived again. In the north, Celtic mythology winged man's imagination towards the western isles of Lyonnesse and St. Brendan. So, now more than ever he brooded over a blissful human life in islands far beyond the setting sun; while would-be crusaders listened eagerly to learned monks discoursing of the might of that far eastern champion of the Cross, Prester John. Their ships could now plough the ocean. Why, then, from the Fortunate Isles as base, should they not round the tip of Africa, still believed to be a short continent, and so, with the help of that invincible potentate, attack the victorious Turk in the rear?

These hopes and strivings became incarnate in a prince who deserves the title of last of the crusaders. Henry, son of King John of Portugal, and of Philippa, daughter of John of Gaunt Duke of Lancaster, showed his prowess at the conquest of Ceuta from the Moors in 1415; but he then abandoned a military career for that of the Portuguese Navy, seeing in that already efficient force the means of ultimately establishing contact with the mighty Prester John. Possessing organising power equal to his fervent zeal, he greatly

improved both ships and shipmen and proceeded to despatch successive flotillas towards the dreaded Cape Bojador, though Arab seamen constantly declared the seas there and beyond to be unnavigable owing to blackening heat and awesome monsters.

For this terrifying quest he found ready to hand a serviceable local craft, the caravel, which was a Portuguese



MODERN BARQUENTINE



16TH CENTURY CARAVEL



PRINCE HENRY THE NAVIGATOR

form of the Levantine "lateener." On their coasts, tide-swept and often beset by Atlantic gales, Portuguese fishermen had adopted the lateen rig on two (or sometimes three) small masts as best suited to beating against any moderate head wind; and the boat was kept small and light so as to be rowed at need against both wind and current. Here was the craft (product of hard necessity) which organising genius adapted to clamant world needs. Thanks to constant improvements by

Prince Henry and his advisers, the caravel became an ocean-going three-master, with lateen sails but still workable by oars. When finally fitted with square sails on her foremast she became the ideal vessel for exploring the coasts of Africa—a task which led on to the crossing of the Atlantic.

Thus, it was reserved for Prince Henry to attempt, by a series of systematic efforts based on the little port of Sagres, near Cape St. Vincent, the exploit at which Necho's Phoenicians had casually flown in the contrary, and on the whole easier, direction. But what a contrast in the equipment! We, of the age of steam, think with pity of the small Portuguese vessels toiling down the coasts of Africa and often throwing overboard nearly half their crews from illness. Yet the difference between their decked and handy caravels and the open Phoenician row-vessel carrying one mast with a clumsy square sail, is not much greater than that which separates the caravel from the modern ocean liner. As we saw on page 31, the ship of Sataspes attempted to pass down the west coast of Libya, but as he truly said: "She was stopped and would go no further," i.e. owing to contrary wind and current. Now, by the year 1450, after an interval of about 4000 years, man had evolved a lateen rig on two or more masts which enabled a craft to make way against any average head wind. Therefore he now learned to take longer and longer voyages off unknown coasts, and finally, like a fully-fledged eaglet, dared to wing his way into the void of ocean, which poets and philosophers had fortunately dotted with islands.

For this adventurous flight man had, in the course of ages, devised certain necessary helps. About the middle of the fifteenth century the compass had become a serviceable guide. The claim that it was first invented by the Chinese or Arabs is now generally discredited; but its origin is unknown. First described in the twelfth century, the magnetic needle was improved,

¹ Herod., IV, Chap. 43.

especially by the Genoese, so that it was termed "the Genoese needle" (see later p. 75). It had round it the thirty-two points painted on a card, by which the steersman steered his course. By 1450 it was well known to northern peoples. For, a little earlier, the author of The Libelle of English Policie wrote of Bristol seamen voyaging to Iceland:—

"Out of Bristowe and costes many one Men have practised by needle and by stone Thiderwards within a little while."

Also, about 1480, Martin Behaim adapted the astrolabe to nautical purposes. It was a heavy flat metal disc, having two pointers pivoted on the centre, while the circumference was divided into quadrants which showed the degrees, thus enabling the holder to calculate his latitude by the meridian altitude of the sun according to tables that had long been compiled. As for "dead reckoning" of the ship's speed, it was calculated very roughly by throwing some object overboard and measuring by an hour-glass and guess work the ship's rate of speed in leaving it behind. The hour-glass was then the only measure of time.

Further, Prince Henry and his compeers improved the means for recording coastal discoveries graphically. Captains were taught to draw charts of what they saw, and the resulting portolani (their origin was Italian), mark the beginning of exact cartography. As the chronicler of The Conquest of Guinea well observed—"What had before been laid down in the Mappa Mundi was not true, but was by guess work; but now it is all from the survey by the eyes of our seamen." All these portolani were preserved at Sagres, so that by degrees a fairly correct map of West Africa was compiled. In short, a school of navigation was there built up which soon placed Portugal at the head of seafaring peoples, and furthered the discovery of a sea route to the land of Prester John.

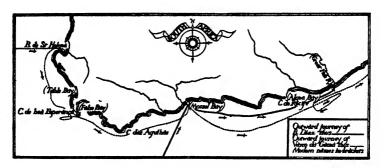
In fact the Portuguese were the first to organise maritime discoveries; and this fact placed them at the head of seafaring peoples and conferred untold boons on mankind. A great organiser is not baffled by a few rebuffs. For example, when failure after failure occurred in the efforts to round that impossible Cape Bojador, Henry met them with unbroken courage, profited by the experience thus gained, and finally ordered his squire, Gil Eannes, never to return until he had succeeded. Then the thing was done. By putting far out to sea Eannes gave the lie to sailors' tales and opened the way towards the generally calm waters and fertile coasts of tropical Africa, an exploit which, as will soon appear, led on to the crossing of the Atlantic. As a reward for rounding this dreaded cape, Pope Martin V now granted to Portugal possession of the lands she might discover as far as, and in, the East Indies—a great incentive to further efforts, which were helped on by the discovery of the Cape Verd Islands (see Chapter V).

The death of Prince Henry in 1460 did not end the impulse which he had imparted to southern exploration; for the next decade saw the Bight of Guinea almost completely explored. In 1487 Diogo Cam reached the mouth of the Congo, and its vast volume of water disproved the hoary legend that tropical Africa was rainless and burnt up by heat. Anxiety to make good the Papal award led in 1487 to the despatch from Lisbon of an experienced seaman, Bartholomew Diaz, with two caravels of 50 tons each, also a store ship. After passing Cape St. Augustine they were caught in a northerly gale (very unusual in those latitudes) and driven at length, out of sight of land, far south into the belt of constant westerly winds which then drove them eastwards. Finding open sea before him day after day, and beset by cold gales which threatened them with death by exhaustion, Diaz resolved to turn north. As his caravels could sail with wind full on the beam, he thus escaped the fate which must have befallen a Roman

ship, for he at last sighted land near what is now called Mossel Bay. Thus, thanks to his handy little craft and to very unusual weather conditions, he had passed the tip of Africa without ever seeing it, and made land in a bay where food and water were obtainable. Proceeding on his quest, and when well to the east of Mossel Bay, he encountered the full force of the Mozambique southerly current; and his weary and half mutinous crews compelled him, then at the Great Fish River, to put about. On his return voyage he rounded a difficult jagged cape with an ease which refutes the popular fiction that he called it the Cape of Storms, and that it was the King who gave it the name of Good Hope. In due course he reached Lisbon, but, as he had failed to reach the Indies, received only a moderate welcome. The greatness of his exploit was, however, clear to a seaman who witnessed his return in those tiny but serviceable caravels. Christopher Columbus saw in that event the death blow of his own hopes to interest John II in a discovery of the Indies by the Atlantic route, and thenceforth he, or his brother Bartholomew, begged the sovereigns of England, France and Spain for their support. The last finally granted it, with the result that, as will appear in the next chapter, Spain gained the title to the western route to the Indies.

The discovery by Diaz of the great length of Africa and the immense distance of the sea route to the Indies was destined to exercise an incalculable influence on shipbuilding; for it was long distance voyages which were the making of ships and seamen. Gone now were the times when man merely crept along the coasts. To reach the gold and spices of the East, one needed ships roomy enough to preserve the health of the crew in the tropics, and bring back considerable cargoes. Accordingly, Diaz, in 1496-7, who helped the equipment of the next Indian expedition, designed larger ships, with square sails on the fore- and main-masts, and a lateen on the mizzen. The flag-ship San Gabriel

(see plate) was 84 feet long and had a sail-area of more than 4000 feet. The greater size of his ships enabled that unconquerable commander, Vasco da Gama, after a long halt in the Cape Verd Islands, to stand away on an immense southerly stretch so as to make head against the prevalent south-east winds. Thanks to



SOUTH AFRICA

size and seaworthiness, the crews survived the everincreasing hardships, due to the cold winds, in a run of 4300 miles, during 93 days out of sight of land. At last, in the belt of westerly winds they turned eastwards, and made Sta. Helena Bay. Finally they weathered the Cape of Good Hope, and, after a long and very doubtful struggle against the southerly Mozambique current, sighted fertile land which they named Natal.¹ Then, beating ahead slowly against the head current they at last, when not very far from Mozambique, saw a strange sail, and "thanked the Lord for having brought them into a region of navigation."

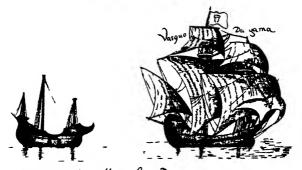
Thus did the West and East for the first time join hands by sea. For Arab seamen, though bold explorers thus far, had not ventured further south into that strong current, for fear (as Marco Polo pointed out in Chapter

¹ On 28th December, 1497 the Roteiro of the voyage mentions the setting of studding-sails. See Roteiro of Da Gama's Voyage (Hakluyt Society) edited Ravenstein, p. 16.



VASCO DA GAMA





Honario To necula occelho g 25 fizerad

VASCO DA GAMA'S SHIPS AND STORE VESSEL

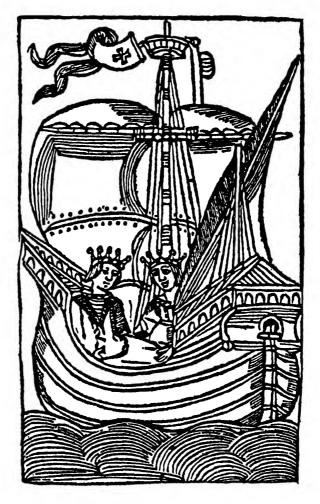
26) lest they should never return. Now, at last the Portuguese breasted that terrifying current, and their reward was the Empire of the East. At Mozambique Vasco da Gama engaged two "Moorish" pilots who understood the use of "the Genoese needle"; and at Melinde a Gujarati undertook to pilot them to the Malabar coast of India. Thus does Camoens in the patriotic epic, the Lusiad, set forth the news given by Arab seamen:—

"They say that ships, as long from stern to beak
As ours, are wont to navigate their seas;
That they go forth from eastern shores to seek
The coasts that southward broaden, and from these
Back towards the birthplace of the sun they sail
Unto a land of men like us, of features pale."

Thanks to Arab pilotage and the favouring monsoon they reached Calicut in August, 1498, after a voyage of noths—the longest yet recorded. There the vision of infinite wealth from the gold and spices of the Indies began to dazzle their eyes. It encouraged them amidst the terrible mortality from scurvy on the return voyage (only 55 out of 170 saw Lisbon again in mid-September, 1499). But da Gama's quenchless fortitude had won for Portugal the control of eastern sea-borne trade; and King Manoel now assumed the title of "Lord of the Conquest, Navigation and Commerce of Ethiopia, Arabia, Persia and India." Thus, by the inexhaustible energy of Prince Henry, his shipbuilders, captains and their successors, vessels had been constructed which were navigated successfully across two great oceans and back, thus at last linking West Europe with the East Indies. In the perusal of these exploits we are apt to think only of the commanders. Let us not forget the age-long toil of the designers, builders, and workers of all kinds who put together that greatest of all human triumphs hitherto, the ocean-going ship.

To sum up the chief points in our rapid survey of this great subject.—No progress could be made in navigation

so long as seamen used only oars, one mast with a square sail, and paddles for steering. The oceans remained



FIFTEENTH-CENTURY TWO-MASTER

unexplored (save for brief and resultless efforts) until some unknown inventors adopted a second mast (whether

foremast or mizzen is uncertain), which shortly afterwards was balanced by a third mast. Meanwhile, before 1250, fixed rudders were used in Baltic ships; and when these were fitted with long tillers (or later with large wheels having spokes) larger rudders could be worked with ease, and therefore larger ships could be steered well. Later, came the use of topmasts and studdingsails; but the increased spread of sail necessitated a deeper hull fitted with a keel. Then, by about 1600, merchantmen of well over 1000 tons could weather gales and stem ocean currents.

CHAPTER V

THE CONQUEST OF THE ATLANTIC

"I judge there is no land unhabitable, nor sea innavigable."—(Robert Thorne, 1527.)

The last decade of the fifteenth century is the most wonderful time in the long history of man's attempts to explore the world. As explained in the last chapter, the full discovery of the sea route to the Indies came as the culmination of age-long efforts in the spheres of science, shipbuilding, navigation and politics. But these same converging influences had already brought about a Spanish expedition, headed by an Italian seaman, to the supposed verge of the Indies in the Atlantic Ocean. Early on 12th October, 1492, Christopher Columbus had sighted one of the Bahamas. The world-wide significance of that event will be clearer if we review briefly the earlier efforts to cast off the strangle-hold exerted by that terrifying ocean on the imagination of man.

For the Romans, that ocean was the end of all things in the West. Intent on supremacy in Europe and the East, they made no attempt to penetrate its vast, tide-swept expanse. Moreover, they nearly exterminated the only tribe which could have done so. Of a truth, Julius Caesar struck a heavy blow at nautical progress, when his fleet of light row-galleys caught the heavy but seaworthy sailing-ships of the Veneti for a brief space becalmed in or near Quiberon Bay, rammed them, hooked down their leather sails, and slaughtered their crews. With them perished the only seamen who,

¹ Caesar, Gallic War, III, 13-16, and Dio Cassius, Chap. 39. See La Roncière, Hist. de la Marine française, p. 3 for sketch of a Gallic ship.

so far as we know, had designed a type of craft suitable for stemming the tides, and weathering the gales, of the Bay of Biscay. That victory of the fair-weather Mediterranean galley postponed for more than a thousand years the development of a kind of sailing ship suited to the Atlantic.

For when that ocean was first crossed, in the stormy inhospitable North, the feat was carried out in row-vessels, equipped with only one square sail. Accordingly, their progress depended mainly on oarsmen. And what oarsmen those Vikings were! In small open craft, of low freeboard, they accomplished the crossings, Norway – Iceland, Iceland – Greenland, Greenland – Labrador, Labrador–Vinland, and back. Even so, however, they failed to ensure lasting results; for row-vessels do not admit of expansion such as will protect either crew or cargo. All that those heroes could achieve was highly to exalt seamanship—an incalculable service to mankind.

The early Northmen were fated to do mighty deeds at sea but to leave them almost unrecorded. Just as, for lack of an inspired bard, the forbears of Agamemnon sank into oblivion, so too the earliest heroes of the North Atlantic are remembered chiefly by the ruined towns and burnt monasteries which they sometimes left behind in Western Europe. Indeed, the most wonderful of their nautical exploits are set forth only in short, prosaic and not very convincing sagas. So disputable are the stories of their discovery of the New World that even Dr. Nansen criticised them as "legends associated with the Greek myths of the Insulae Fortunatae, in which wild grapes and self-sown wheat were said to exist." But, on the whole, modern scholarship accepts the best of the Vinland sagas as authentic. If this be so, Norwegian voyagers were the first white men to land in North America, nearly 500 years before Columbus sighted the West Indies.

¹ Dr. F. Nansen, In Northern Mists, II, 20 ff.

The wonder of their feat grows, the more we know of the incredible hardships which it involved. None but the hardiest of seamen, long accustomed to brave the passage from Norway to the Faroes, Scotland, Ireland, and England, could have survived the voyage to Vinland and back. But, the word impossible did not exist for Norse seamen. During some three centuries those Vikings had harried all possible coasts; they had even colonised Iceland—a marvellous feat about which we know next to nothing; and sailors accustomed to the wild Icelandic crossing would find the further stages to Greenland and Labrador facilitated by the polar current.

Nowhere else in the world have bitter cold and stormy seas been endured and conquered in boats so open and frail. The Viking vessels were undecked, low amidships so as to admit of rowing, fitted there with a rude halfshelter, containing a few box-beds. They carried one small movable mast on which was a square sail. In fact, they were the primitive product of the tidal forest-girt Norwegian flords; for rocks and forests on land and the helpful flow and ebb of tides drive and lure man on to the water. As the habitan of Quebec says: "Rivers are roads which march." Such a land breeds watermen, who in time will be tempted out to sea in search of shoals of fish; and nowhere is the transition from gulfs to the open sea easier. Moreover, the Viking habit of raiding the river valleys of Britain and Ireland called for comparatively small vessels. What they were at first, such they remained with little or no change down to the time of the Norman invasion of England.

The statement that these craft were developed from Mediterranean models is very doubtful; for the northern craft never developed the ram; they were also built very light so as to rise easily to the waves (as is the case still with primitive boats built in the West of Ireland and Scotland). In some respects they resembled Mediterranean ships; but all row-vessels that are adapted

to beaching must conform to certain necessary rules. It is needless, then, to see copying in what is only adaptation to the same imperious necessities. Finally, the Norse vessel must have assumed its type long before any Mediterranean craft came so far north; for the Phoenicians and Greeks got their Baltic amber by overland routes to the Mediterranean. Also the derivation of the Danish word sejl (Anglo-Saxon segel) from the Latin sagulum has been disproved. The evidence, then, points to an independent development in boat-building and seamanship among the Scandinavian

peoples.1

As the first Vinland voyage is assigned to the year A.D. 1003, fully four centuries of strenuous seamanship were behind these adventures. If we may judge by a nearly perfect specimen, the Gokstadt ship of the ninth century now shown at Oslo, their boats were 100 feet long, 16½ feet broad amidships, and freeboard there only 3 feet. The single square sail was used only when the wind favoured; but reliance was placed generally on oars, of which this specimen had thirty-two. Professor W. Hovgaard has computed that a good average crew would cover generally 150 miles in 24 hours; and that they seem to have reckoned distances by that average speed of 61 miles per hour—another sign that they trusted chiefly to oars, not to the sail, which gives wider variations in speed. They had some crude method of reckoning latitude, but in the art of navigation they probably did not equal the Phoenicians. Nevertheless, centuries of struggle with stormy seas bred in the north a race of extremely hardy seamen. Indeed, the exploration of the modern world is due largely to the later union of southern constructional skill with northern hardihood.

The Greenland and Iceland sagas describing the voyages to Vinland, are biased in favour of their respective heroes, and it would be tedious to discuss here the many differences between them. The latest

¹ Here I differ from Mr. E. K. Chatterton, Sailing Ships, pp. 91-94, 112.

and most complete examination of the evidence, that of Dr. E. F. Gray, yields the following results:—An Icelander, Bjarni Heriulfsson, when on a voyage to Greenland in A.D. 986, was driven westwards very far out of his course by a storm, and sighted, but did not land in, a country which was flat and well wooded. Possibly it was Newfoundland.

Leif Ericsson was son of an adventurer, Eric the Red, who, owing to a crime of manslaughter, had to flee from Norway to Iceland (then "extensively colonised"). When expelled thence as an outlaw, Eric sailed westwards until he reached a great land which he named "Greenland" because "people would be attracted thither if it had a good name"; but the danger of the voyage was shown by the driving back or foundering at sea of twenty-one ships out of thirty-five which in one summer attempted

the Iceland-Greenland passage.1

In 1003, Leif, son of Eric, having bought from Bjarni Heriulfsson a vessel and heard from him about the new land of the west, set sail with thirty-five men and came to a mountainous ice-bound country which he named Helluland (probably off Frobisher Bay). Sailing south they found a better land which received the name Markland, which may possibly be Nova Scotia. Proceeding with a north-east wind, they came at last to fertile land, and in their small boat they towed their vessel up a river to a lake, in which were larger salmon than they had ever seen. As the days there were long and the grass did not wither in autumn, they built a house and booths against the winter. One of them, Tryker the German, found vines with grapes in the woods. So, after wintering in this fair land-Vinland they called it—they sailed away in the spring and "had fair winds until they sighted Greenland," and in due course reached home, wherefore their captain was called "Leif the Lucky." He was "a large and powerful man, and of a most imposing bearing, a man of sagacity, and a very

¹ Gray, Leif Ericsson, pp. 28-30. See ship on p. 60.

just man in all things." In the next year his brother Thorvald sailed with thirty men to Vinland and found Leif's booths, but he himself was slain by the Skrellings (Indians). Thereafter his men returned to Greenland.1 Other voyages to Vinland were also unlucky. Thorstein Ericsson, seeking to bring back the body of his brother Thorvald, was "driven hither and thither over the sea," until at last, near winter, they put back and reached home, "worn out by toil and exposure to the elements." But the leader said: "We still live, and it might have been much worse." Later sagas, describing the carrying over of "all kinds of cattle," of Indians scared to flight by the charge of a bull or by a woman Freydis beating on her breast with a naked sword, and similar witchand-bull wonders, may be dismissed as bardic concoctions; but they need not prejudice us against the first narratives, which are simple and detailed, therefore worthy of trust.

As to the position of Vinland, Dr. Gray identifies it with Martha's Vineyard, or No Man's Land; but, as numbers of Indians finally came on the scene, a place on or near the mainland, like the south of Long Island, seems more probable.² At best, the position remains matter for speculation; and, in any case, those Scandinavian adventures ended in failure. Vinland became a subject for reciters to embroider on, and then for centuries passed out of mind, though some writers conjecture that dim rumours of it may have reached the ears of Columbus. Even Greenland was almost forgotten, until in 1576 Frobisher re-discovered it and Meta incognita on the mainland opposite.

The story now swings far forward and southward to more hospitable climes and to lands whose aborigines fled before well-armed sailors coming from wonder-ships. Moreover, the new-comers had discovered in the Atlantic half-way houses that tempted them to further

¹ Gray, Lief Ericsson, pp. 38-47.

² This was the view of Mr. H. Hardy, but he revised it in favour of North Carolina, as held by Mr. M. Mjelde. See R. Geograph. Journal, Vol. LXV.

efforts. As we have seen, poets and philosophers, from Homer and Plato onwards, had pictured islands of the blest far out in the ocean where war and want were unknown. And, of late, sailors of Western Europe had lit upon islet groups which only half fulfilled these hopes, and thus kindled the desire for larger and safer islands.

"Man never is, but always to be, blest."

Also these forward gropings of his were never keener than in the age which witnessed the loss of Constantinople to Islam. As we have seen, the southern urge had carried him far down the coast of Africa, while lucky accidents had already revealed two island groups far out which seemed to beckon him on towards the longed-for Atlantis.

When and how sailors first came across these Azores and Cape Verd groups is unknown. The alleged find of Carthaginian coins on Corvo, one of the smallest and remotest of the Azores, has inspired the hopeful legend that that people traded there. But reason intervenes and asks-with whom? For coins pre-suppose intelligent natives on that lonely rock, which in that case would rival even Easter Island, that mystery island of the Pacific. In truth, the Azores scintillate wonders. In the twelfth century an Arab geographer, Edrisi, asserted that nine islands lay far out in the Western Ocean; and that is the number of the Azores. Did Arab seamen ever get driven 800 miles away from land by easterly gales and yet survive? Next come Flemish claimants, who rely on the fact that some islands far to the west of Portugal were long called the Flemish Islands. That is all. Is it enough?

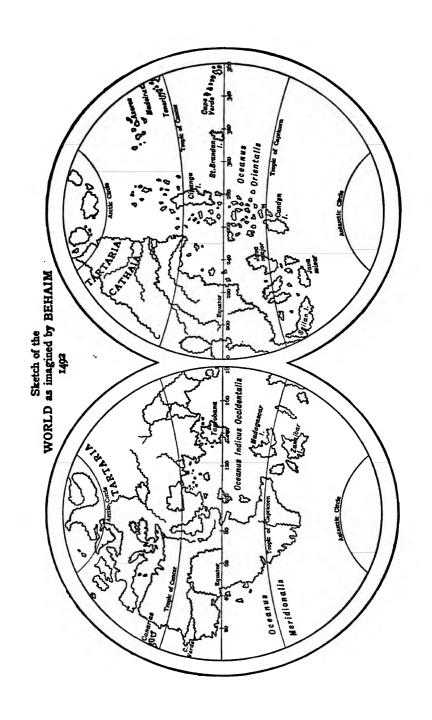
Last come Portuguese explorers. Their portolani of about 1350 show islands far off their land. They rely, too, on a Catalan map of 1439 which states that such islands had been discovered two years before. Also in 1439 Alfonso V of Portugal granted to Prince Henry the right to colonise seven of them. In 1445, settlers

went forth thither, and the group was soon named the Azores, or Hawk's Islands. Again the name challenges inquiry. For though that swiftest of birds (as Homer called it) could fly the 800 miles thither from Lisbon, how did it survive and multiply?

Around the second pointer westwards, the Cape Verd Islands, buzz disputant discoverers. Prince Henry's captain, Cadamosto a Venetian, long enjoyed that title, having (it is said) been driven out thither by easterly winds in 1456. But later research favours a prior discovery by Gomez or an Italian, Noli.1 What is certain is that this group provided good insular bases for explorations further south, and also led navigators out towards the New World; for the south-east winds and current which were encountered beyond that group edged them in a south-westerly direction and probably led to the discovery of Brazil. When and by whom this last great find was made is again doubtful. For a long time that honour was ascribed to Cabral in his East Indian expedition of 1500; but Robert Thorne, a merchant of Bristol and London, states that it was found before 1494. If this statement be correct, the discovery of South America almost synchronised with that of the West Indies by Columbus. In any case, south-east winds and current rendered the finding of South America certain so soon as ships began to use the Cape Verd Islands as bases for the African coastal explorations which we have already surveyed.

We now come to a far greater man. But even the figure of Christopher Columbus is partly veiled in mystery. For instance, modern criticism has thrown doubt on this among his many wide-spreading claims, that he long lived at Porto Santo (one of the Madeiras), and there saw signs which betokened life far beyond the setting sun. It is impossible, however, to discuss fully the much disputed questions as to the original

¹ For these rival claims see Prestage, The Portuguese Pioneers, pp. 122, 141, 143, 144; and Mr. Yule Oldham, The Discovery of the Cape Verd Islands.



views and intentions of Columbus concerning transoceanic lands, especially whether he knew of, and acted on, the map and letters of the Florentine geographer, Toscanelli, as to the assumed short distance across the Ocean to Cipango (Japan) and India. Vignaud adduces strong arguments as to their non-authenticity.1 question is also complicated both by the likeness of the handwriting of Columbus to that of his brother Bartholomew and by the vagueness of his own statements. A recent critical authority thus sums up—"To assert that, before he had discovered the New World, Columbus held any given opinion would be to assert something wholly impossible of proof."2 That may be true. would the great explorer have persevered with his quest, in spite of endless difficulties, if he had not believed in its value and practicability? For it is noteworthy that the voyager and geographer, Martin Behaim, of Nuremberg, whose map of the world dates from 1492, placed many islands in the Atlantic west of the Cape Verd group, also several others to the north and south of Cipango, which was placed far to the east of Asia; thus it would be easy to cross the Atlantic from group to group, and so reach Asia.

Moreover, the discovery in the Paris National Library by M. de la Roncière of a map (probably of Genoese origin about 1490 and possibly annotated by Columbus himself) shows the urge of that time for the re-discovery of the wealthy "Island of Seven Cities" (query Antilla). There, far out in the Atlantic "seven Portuguese bishops, followed by their flocks, sought refuge, and each one founded a city." Such is the legend of a migration of Christians overseas at the time of the Moorish conquest of Portugal. Prince Henry had vainly sought to find

¹ Vignaud, Toscanelli and Columbus.

² C Jane, Voyages of Columbus, Vol. I, p. xxviii (Hakluyt Society, 1930).

^{*} Such is the conclusion of the latest inquirer into this dispute, Mr. F. A. Kirkpatrick in *The Spanish Conquistadores* (1934), Chap. I.

⁴ De la Roncière, La Charte de C. Colomb. (Paris, 1924).

this island; and it was fitting, surely, that the year 1492, which saw the expulsion of the last Moors from Spain, should witness an attempt to re-discover this unconquerable Christian colony. Perhaps this was the motive which impelled Columbus and his patron, the saintly Queen Isabella.

No one was so suited to this quest as Christopher Columbus. From his early years at Genoa he had been a seaman, early joined Portuguese expeditions to Guinea, and voyaged in 1476 as far as England, so he claimed. His statement, that he went on to Iceland and beyond, is probably false. However, he became an experienced mariner, and in Portugal, where he and his brother Bartholomew settled, he conversed with those who believed in the existence of Antilla. He also claimed to have resided in Porto Santo. Further, the brother's continuous work at making maps and charts must have strengthened Christopher's conviction as to the relative smallness of the oceans and the comparative nearness of Asia. Almost certainly he studied the Imago Mundi of Cardinal d'Ailly (though only manuscript copies were available until 1490), which set forth the views held since the time of Aristotle on these subjects. Wellread men generally believed that the great island of Cipango, which Marco Polo pictured as abounding in gold, might be reached by sailing westwards across the Atlantic; and a religious enthusiast like Columbus, who longed to convert the heathen beyond the seas, would naturally hold this notion as an article of faith.2 witnessing the return of Diaz from the Cape, he must have seen that now was the time to strive for his grand aim.

When repulsed by the Portuguese Court, he turned to that of Spain; his brother vainly sought help from London and Paris. Christopher, after undergoing several rebuffs in Spain from practical men, finally

¹ Prof. A. P. Newton, The Great Age of Discovery, pp. 78 ff.

² Prof. Pastor, in The Great Age of Discovery, p. 19 ff.



gained the support of the Queen by his religious appeals. Not, however, until 1492 did the joint sovereigns, Ferdinand and Isabella, adopt his project; but then their conquest of Granada from the Moors, and resulting plunder of Jews, enabled them in part to finance his effort, which also had the support of the Pinzons, wealthy seamen of Palos. The Church favoured his plan, but no priest accompanied the first expedition. That its main object was commerce appears from his receiving from Ferdinand and Isabella a letter to present to the Great Khan—a sign that he had led them to hope to establish contact with Asia.

At last, on 2nd August, 1492, Columbus, with eighty-eight adventurers (some of them gaol-birds) set sail from Palos. He commanded the Santa Maria of about 100 tons; while the Pinzons commanded the two caravels, Pinta of 50 tons and Nina of 40 tons. These probably carried square sails on their foremasts. tonnage should always be doubled to get our measurement.) The Santa Maria was probably barque-rigged, having a high bowsprit carrying a spritsail, and a mizen mast carrying a high-sweeping lateen sail (see frontispiece).1 Her fore- and aft-castles were not too lofty to impair seriously her sea-going qualities; and her presumed facsimile, built in Spain in 1893 for the Chicago Exhibition, crossed the Atlantic in 36 days, her maximum speed being about 6½ knots per hour. Columbus took seventy days in all; but these included a long stay at Gomera, one of the Canaries, to refit one of the caravels, which had lost her rudder. Their run from the Canaries to San Salvador in the Bahamas occupied thirty-six days, the weather throughout being very favourable, but characteristic of that generally calm belt with easterly breezes. The success of the effort was

¹ The fifteenth-century "full-rigged" ship carried a large lateen sail on her mizen, so she resembles our "barque." Square-sailed craft came in more and more, displacing the galley. By 1610 even the Algerines, etc. adopted them. (See Morgan, History of Algiers, II, 628.)

due to his acquaintance with that belt and his expert seamanship, which long imposed on a discontented but ignorant crew, whose need of him just outweighed their dislike.

In truth, the only difficulty during this otherwise calm and easy voyage arose finally from the fears of his seamen, who argued that, as the easterly wind had favoured them for three weeks, "no wind in these seas ever blew in the direction of Spain"; therefore they had better throw this domineering foreigner overboard. Hard work it was to coax them on, but Columbus also tricked them by giving out that they sailed several leagues a day less than was really the case. Encouraged by the sight of driftwood or the flight of land birds, the crews were lured onwards, and by October 3rd he hoped that Atlantic islands were past, and that he neared the Indies. He told the crew they had come 584 leagues when they had really come 707. At last, very early on 12th October, he perceived a light far ahead; it proved to be on one of the Bahamas, which he named San Salvador (perhaps our Watling Island). Next he coasted along the other Bahamas, North Cuba and Española. The last he gave out to be Cipango, and Cuba to be part of Asia.1

Very interesting is his first letter to Spain, written during the return voyage in February, 1493. He describes the natives of the Indies as all going naked, having no iron or steel, or indeed any weapons at all except canes with a sharp stick at the end; and they dare not use even these owing to excessive timidity; but when their fears are allayed they are generous and seem intelligent. "They do not know any creed and are not idolaters, ... and they are firmly convinced that I, with these ships and men, came from the heavens." They possess very many canoes, made out of a single trunk, some being very large, with seventy or eighty oarsmen: "their speed

¹ Maps of the following years show the confusion of thought on these subjects. See map of "Ptolemaeus, Argentinae" (1513), inside the cover.

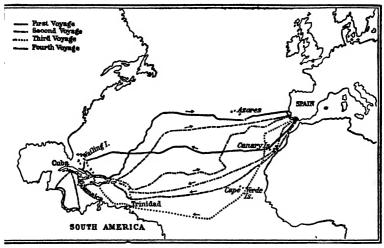
is incredible, and in these they navigate among all these islands, which are innumerable." He then describes the size and wealth of Cuba and Española: in the latter he has fortified a post to command the gold mines and the trade "with the mainland here as with that there, belonging to the Great Khan, where will be great trade and gain." Whatever be the meaning of these words, they surely imply that he believed Cathay to be easily reached from Cuba and direct by sea. he deemed Cuba part of Asia, the name Indies was applied to his discoveries. But a whole volume would be needed to set forth his geographical gropings and those of his contemporaries. The accompanying section from Contarini's World Map of 1506 shows that even then there was no suspicion of a new continent west and north of Cuba. The "end-maps" of this volume show the ideas prevalent in 1513 and 1527: their extraordinary mistakes are highly significant. Indeed, no map comes near the truth until Hondius's map of Drake's voyage (see facing p. 112).

Searching always for gold and disgusted at the poverty of the Indians, Columbus decided to return home, and the wreck of the Santa Maria off Española led him to choose a caravel for the return voyage. On 4th January, 1493, he set sail for the north-east, and that course soon brought him into the Gulf Stream and, later, the belt of south-westerly winds. Possibly his knowledge of the easterly drift towards the Azores and Madeira had led to this choice of route; or was it due to a seaman's instinct that constant easterly winds in one belt must cause westerly winds in another? Certainly he made the Azores with ease and reached Lisbon on 4th March, thus confirming his reputation both for knowledge and seamanship.

Journeying through Portugal and Spain to the Court; then at Barcelona, Columbus displayed to wondering crowds red-skinned Indians and lumps of gold. These

¹ So too G. E. Nunn, Geographical Conceptions of Columbus, p. 50.

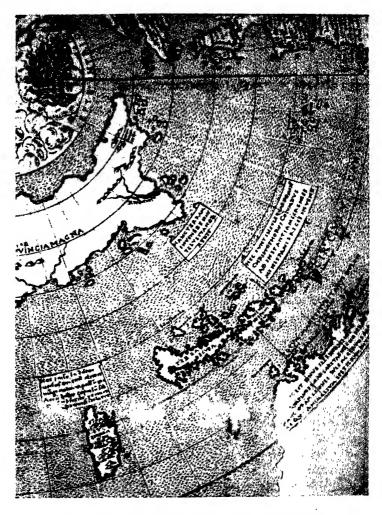
ensured an honoured welcome from Ferdinand and Isabella, and Spain vibrated with eager hopes. By the Bull of 4th May, 1493, the Spanish Pope, Alexander VI, granted to the joint sovereigns—now styled "Catholic"—all lands now, or to be, discovered west and south of a line one hundred leagues from the Azores and Cape Verd Islands. This dividing line being utterly vague,



THE FOUR VOYAGES OF COLUMBUS.

Spain and Portugal decided by treaty in June, 1494, to place it 370 leagues west of the latter very extensive group, thus securing for Portugal the coastline soon to be known as Brazil. As Robert Thorne, later, dated the discovery of Brazil before 1492, the secret knowledge of this may have led John II of Portugal to insist on this shifting westwards of the line. Certainly the treaty was a diplomatic victory for him, and it led on eventually to the acquisition of a mighty empire. For never have short bargainings led to results so immense as in that wonder-working decade. Soon, indeed, it came to this: that Portugal claimed all lands to the south of the equator, 1

¹ A. P. Newton, Great Age of Discovery, pp. 54, 55.



SECTION FROM CONTARINI'S MAP OF THE WORLD (1506)

until Magellan's voyage set limits to Portuguese acquisitiveness in the south. The Papal Bull of 1493 has been hotly censured. Thus Purchas (Pilgrims, II, § 6) wrote:—"What is it but with his two horns to push at, and out, both Nature and Grace?"—Of course it aimed at averting Spanish-Portuguese strife. But it

had deplorable results, as will soon appear.

Meanwhile the lure of gold had raised a furore in Spain; and the second expedition of Columbus, that of September, 1493, was beset by greedy adventurers. In seventeen ships he carried no women, a few priests and about 1500 "colonists" (including nearly a hundred stowaways). In this voyage (again quite easy—so easy as not to discourage lazy scoundrels for the future) Dominica and adjacent islands were sighted, but the settlement in Española proved to be a wreck; for the natives, roused to fury by lust and rapacity, had killed or dispersed the Spaniards. The new "colonists" soon excited the same feelings; and the settlement became a scene of anarchy. Columbus, in his despatch of 30th January, 1494, urged the need of employing Carib slaves for the working of the gold mines; and when the inevitable revolt occurred, five ships laden with "Indian" rebels were shipped off to Spain (June, 1495), there to be sold as slaves. The seizure of West African negroes was the next step downwards; and thus began an evil destined, as we shall see, not to be stayed until 1865. Another unfortunate result of the illconsidered rush for the gold of the New World was the neglect to take out Spanish women, the result being the rise of a great mulatto population and endless feuds. In truth, the only valuable gift of Columbus to the new lands was the introduction of the sugar-cane from the Canaries, and even this accentuated the demand for negro slaves.

As we are here concerned only with the first crossings of the Atlantic and their results, we must pass over the third and fourth voyages of Columbus. Up to the end of his harrassed life in 1506, he believed that he had discovered part of Asia and adjacent islands. For with all his great qualities he lacked the critical judgment which alone can prune too eager imaginings. Yet there is a half-truth in the saying of Winsor: "His discovery was a blunder: his blunder was a New World: the New World is his monument." This is but a half-truth; for Columbus sighted only a small part of Central America and a mere fraction of South America, viz. that opposite Trinidad. And a New World was far from his thoughts.

This unbelievable truth was first revealed by the voyages and keen intuition of Amerigo Vespucci. Around this explorer (a Florentine who in 1505 entered for a time the service of Spain) the storms of controversy have raged. He claimed to have made four voyages of exploration off South America; but many critics reject his stories about the first and fourth voyages. Others accept them and maintain that in his third voyage (made for Portugal) he traced correctly the Atlantic coast south of the Amazon far into the supposed Southern Ocean down to latitude 50° S. If so, he was the chief discoverer of Brazil. He thereupon wrote: "It is lawful to call (the new countries) a new world: I have found in that southern part a continent more populous and full of animals than our Europe, or Asia, or Africa." As he was the first to declare that the new lands were, not a string of islands, but a continent apart from Asia, it was in Waldseemüller's map of 1507 fitly called after him America. But we must here note that some years elapsed before this name supplanted that of "Terra Crucis," first applied to what we call South America, and several more before it spread most illogically to the northern continent. To cite one case out of many: even so late as 1532 Grynaeus of Basle calls the southern continent "Terra Nova," (with "Prisilia" tapering southwards); while beyond a strait to the north stretches a thin peninsula called "Terra da Cuba," with the

¹ A. P. Newton, The Great Age of Discovery, p. 126.

island Zipangri (sic) not far off in a sea bounded by Asia. Not a single map (except vaguely that of the Spanish pilot Juan de la Cosa, of 1508) does justice to the discoveries of the Cabots, to which we must now turn.¹

Seeing that the Pope had awarded transoceanic discoveries in the West to Spain, in the East to Portugal, King Henry VII of England, alike prudent and Catholic, favoured no "voyage to the Spiceries" which openly transgressed this award—a motive which probably explains the far northern transatlantic course taken by John Cabot in 1497. Hitherto, owing to the long civil wars and the extreme caution of the new King, English maritime policy had lagged behind in the new oceanic race. Yet her seamen had not lost their old enterprise, those of Bristol having long pushed on trade both with Portugal and in the North Atlantic. About 1480, John Jay sent out a ship far into that ocean for the discovery of a fabled island called Brasil. Storms drove her back, but other efforts were made owing to a widespread conviction that "the inhabitable extreme East is very near the West." Therefore a seaman-adventurer, John Cabot (Genoese by birth but Venetian by adoption), who held similar views, naturally settled in Bristol (then by far the most adventurous of our ports) with the hope of heading explorations in the North Atlantic. After long struggles and voyagings he succeeded in persuading prominent merchants of that city, and finally Henry VII, that explorations in those waters would lead to the nearest parts of Asia, not far from Cipango and the Empire of the Great Khan. Even so, the cautious King did not, until 1496, grant him letters patent for this expedition, with power to possess any new found lands not yet visited by Christians, thus giving England a first claim on the north of that continent. On 2nd May, 1497, Cabot, with his young son Sebastian

¹ Mr. G. Nunn has lately advanced arguments for dating la Cosa's map 1508, not 1500 as formerly believed.

and seventeen others, set sail from Bristol in the small but fully rigged bark *Matthew* for the northerly route.¹ With far smaller resources, and far less favoured by weather, than Columbus, Cabot sighted no land during a run of 54 days, but the crew seemingly remained faithful during 700 leagues of weary zigzagging. Unfortunately no journal or log of the voyage has survived to reveal the unequalled wonder and greatness of this exploit in a single tiny craft through cold and stormy seas.

His landfall is still in dispute. It has been assigned to Labrador (so named after a Portuguese landowner (labrador) of the Azores who had furthered the expedition), or else to Newfoundland or Cape Breton Island. After hoisting the flags of St. George and St. Mark, he sailed on south-west far along the coast—a fact which tells against an insular landfall. He saw no natives and only a few of their tools or traps, but noted that the sea swarmed with fish, the climate was warmer than that of England, and the tides rose only about six feet-facts which favour the Nova Scotian claim. Helped back by the west winds, the Matthew reached Bristol on 6th August, "all safe and sound." He gave out that he had reached the eastern edge of Asia, but adduced no proofs. The cautious King presented the discoverer with £10, but after further consideration awarded a pension of £20 a year to "our well beloved John Calbot (sic) of the parts of Venice." As a nautical feat Cabot's voyage transcends that of Columbus; but, seeing that the northern route was stormy and led seemingly only to furs and fish, both it and his second little-known voyage remained fruitless.

In truth, no great explorer received less credit in his own time, and long afterwards, than John Cabot. Only of late have many details of his voyages and those of his son, Sebastian, been revealed,² and there are now

¹ J. A. Williamson, Voyages of the Cabots (1929), pp. 144-64. ² Ibid., Chap. VI.

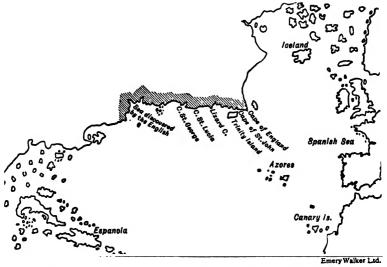
good grounds for believing that John Cabot in his second voyage (1498), reached a bay which corresponds with that of Chesapeake, or even further south. For the northern three-fourths of a map of Terra de Florida, by the Spanish pilot, Juan de Cosa, as far as Cavo de Ynglaterra in the north, are marked with English flags down to a bay "discovered by the English." Therefore, on the ground of discovery, Henry VII had a prior claim to the North American coast at least as far as Chesapeake Bay; and that Continent should by right, be named Cabotia, not America, which belongs properly only to the Southern Continent. Never has fortune dealt so churlishly as with the silent Cabot, and so lavishly as with the garrulous and pushful Amerigo.

As this work deals mainly with maritime discoveries that led to the establishment of new homes for mankind, I can mention here only the practical results accruing from that murderous quest, the North-West Passage to the Indies. In spite of the loss of two Portuguese seamen, the brothers Corte Real, with their crews in 1502, the abundance of fish found off Newfoundland attracted French and Portuguese sailors to those waters, long to be claimed by the latter as theirs, and called after bacallaos (cod). Also in 1523, Verrazano, an Italian in French service, sailing via Madeira, reached what was probably the coast of Florida. (For many years France claimed that coast, but her colony there was to be rooted out by the Spaniards.2) Verrazano coasted northwards, perhaps even as far as Cape Breton, hoping to find thereabouts a strait leading to Asia. He returned, bringing a hopeful report; and this, together with the discoveries of the Cabots, probably induced Robert Thorne, merchant of London, to indite a letter accompanying

¹ I have found such claims in our archives even at the time of the Seven Years' War.

² For the decline of French sea-faring after its early and little-known energies, see La Roncière, La Marine française, IV, 1-131; also G. Clerc-Rampal, La Mer. I must omit the early exploring efforts of Germans, Flemings, and Danes; for they led to few practical results.

his world-map of 1527 dedicated to Henry VIII. In this "perswasion," Thorne pointed out that the only way for Englishmen to win fame and profit at sea was by way of the North, to discover which is "your charge and duty"; for we dwell near that quarter, where for a time there is perpetual light; and our ships can readily go by "the back side of the new found land," and so



From the Chart of the Atlantic by Juan da Cosa, 1500 (?).

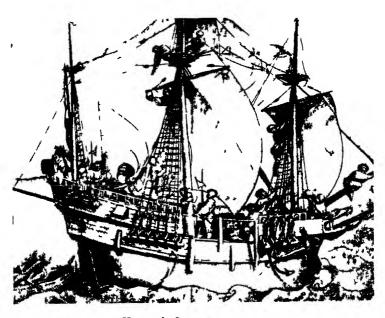
reach the "South Seas and the Indies Occidentall," abounding in gold and spices. To Doctor Ley he sent fuller arguments, clinched with the noble words quoted as motto at the head of this chapter. He inspired Hakluyt, our first naval historian, who in his turn was the inspirer of Ralegh and Gilbert.

More speedily fruitful were the results in France, where Francis I took keen interest in maritime affairs, building a great harbour at Havre in 1516. Thus in

¹ Hakluyt, Principal Voyages of the Eng. Nation (Everyman Ed., I, 216 ff). For the efforts, especially of Bristol sailors, see J. A. Williamson, Short Hist. of British Expansion, pp. 74 ff.



STATUL OF CARTIER AT ST MALO



HOLBEIN'S SHIP, ABOUT 1532

April, 1534, Jacques Cartier, of St. Malo (home of stout Breton sailors who had voyaged to unknown seas), struggled through the Strait of Belle Isle and then strove to find openings westward both in Labrador, which he named la Terre de Cain, and further south, where Chaleur Bay at first gave promise of a western strait.1 Baffled there, he rounded Anticosti Island, and sighted a promising passage, only to be beaten by the strong He therefore put about for St. Malo, where he arrived safely in September. The hopeful prospects thus opened up induced the King to despatch him again; and in May, 1535, he set sail, reaching the St. Lawrence estuary in mid-August, beaching his vessels thereafter in the Charles River under the height which was to be Quebec. As the Indians were friendly and the land promising, he resolved to push on up that noble river, and early in October reached the Indian settlement of Hochelaga under a mountain which he named Mont Réal.² Thence he looked forth westwards on open fertile land and the river pouring down a rapid, soon to be named La Chine, as giving promise of China. During the winter the crews suffered sharply from scurvy, but finally in mid-July he cast anchor at St. Malo. Though he had failed to find a North-West Passage (destined not to be threaded until by Amundsen in 1905) yet he dowered France with Canada—a bequest comparable with that of Columbus; for while the Genoese bequeathed to Spaniards mainly treasure, the Breton handed on to his countrymen a homeland.

The intellectual, social and political results of the discovery of the New World are incalculable. Can we measure its influence on geography, science, and the growth of freedom of thought? Consider the mental awakening shown in, and resulting from, works like Sir Thomas More's *Utopia* (published in Latin in 1516). In that "Ilande of Utopia" (for from the times of Homer

¹ C. de la Roncière, Jacques Cartier, Chap. V.

Dr. H. P. Biggar, The Voyages of Jacques Cartier.

and Plato a blissful life was conceivable only in a remote island) he pictures a community whose good will a stranger wins by the gift of the lode stone, which makes them less "timerous and fearfull upon the sea," so that now they voyage at all seasons and "feare not stormy winter." Thus, he learns of their just and happy life, so different from ours, in which, says More "I forsake God, if I can finde any signe or token of equitie and justice." Accordingly, he sketches "the Utopian weal publique," which opened up a bright vista of hope that beyond the ocean a new and better commonwealth may be formed. Is it not likely that the first pleaders in England for a generous scheme of oversea colonisation, especially the Rev. Richard Hakluyt, of Christchurch, Oxford, drew their inspiration from Utopia?

But many false steps had to be taken and re-traced before mankind found the better way which was to lead, if not to Utopia, still Utopia-wards. The lure of gold had to be proved illusory during a century of eager clutching at an ever vanishing mirage; and the sobered nations of the North were finally diverted from privateering to the prosaic work of settling on the coasts opposite to them where little beside the fur trade, fishing and tillage awaited them. Still, the settlers, when by degrees sifted out, were generally of the stuff to make good pioneers. Thus the efforts patronised by Ralegh in Virginia, by the French Crown in Canada, and directed by Puritan faith and energy to Massachusetts Bay, mark a new beginning in human life.

This is not the place to repeat the oft-told tale of the first feeble efforts at founding new homes across the sea. Enough to say that Sir Humphrey Gilbert's attempt in 1583 to colonise Newfoundland, came to nought, and on the return voyage he himself perished, nerved by the thought: "We are as neere to heaven by sea as by land." Next year the attempt of his relative, Sir Walter Ralegh, to found a settlement on the Virginian coast fared no better. Nevertheless Hakluyt begged him

to try again to "plant" that land, partly by troops returned from the Netherlands. Accordingly, in 1587, an effort was made to send out families; and ninety-one men, seventeen women, and nine boys reached the Virginian coast. A girl, Virginia Dare, was the first English child born in the New World. But the settlement was on the verge of collapse until, in 1607, 120 emigrants arrived and founded Jamestown on the James River. In 1609 the arrival of some 500 more, under the stout lead of Captain John Smith, put the colony on a firm basis. It is noteworthy that, not until 1604, when James I made peace with Spain, were our oversea efforts diverted from privateering to the hard and unattractive work of tillage which lies at the base of true colonisation.

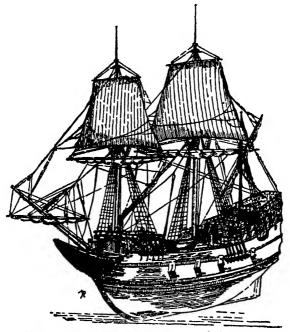
Wars, both foreign and civil, also atrophied French efforts in Canada. There rigorous royal and feudal control crushed all private enterprise. Even after 1615 the great Champlain could not induce his company at Quebec to bring out from France six families a year. And not until 1627 did Cardinal Richelieu establish the Company of New France, with orders to bring out as many as 4000 settlers within sixteen years, Huguenots

being strictly excluded.

On the contrary, the beginnings of New England were due to individualist effort which has proved to be the mainstay of modern colonisation. The increase of religious intolerance during James I's reign led a group of Puritan families, who had sought refuge at Leyden, to try to combine religious freedom with English citizenship in the New World. Accordingly, in September, 1620, seventy-three males and twenty-nine females sailed from Southampton in the Mayflower, a barque of about 160 tons which her captain, Christopher Jones, of Harwich, assured them was "firm and strong under water." Though tossed about latterly in the autumnal gales, the passengers suffered no great hardships, as was evinced by the birth of a boy, who was

¹ See Eng. Hist. Rev., October, 1904.

christened Oceanus Hopkins. Indeed, the fact that both mother and child survived the voyage proved that man could at last defy even the autumn gales of the North Atlantic. The landfall of the *Mayflower*, on 11th November, was north of Cape Cod, within the

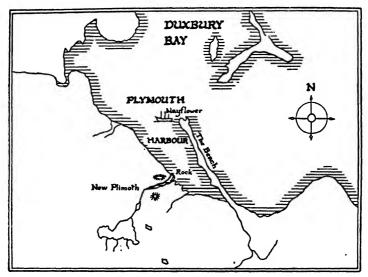


ENGLISH MERCHANTMAN OF 1620 (type of the Mayflower)

limits of the future State of Massachusetts. The first settlement, "New Plimoth," was wisely selected, as this sketch will show.

Virginia Dare and Oceanus Hopkins were the first of a host of English children, destined in their turn to be the parents of a pure-blooded race overseas. This is the chief significance of our early settlements. Hitherto (with rare exceptions) colonists had been only men. Even the Dutch companies had formed mere posts of traders, soldiers and clerks, e.g. that of Fort Nassau

(later Albany) consisted of twelve soldiers and a clerk.¹ In the tropics the Spanish and Portuguese settlements contained no women, who "for their own sakes were kept at home."² Accordingly, the men who manned the forts and warehouses overseas formed connections with native women—an example being set by the great



SITE OF NEW PLYMOUTH

Albuquerque himself. A hybrid Eurasian race therefore sprang up in the tropical lands conquered by Spaniards, Portuguese, and Dutch; but the last, after their occupation of the Cape of Good Hope in 1652, began by degrees to establish families.

Such was the state of things when the precious metals and spices were the only attractions overseas. The northern peoples, slower to move, were left with seemingly inferior lands; and not until more than a century after the landfall of Columbus did England send forth considerable groups of colonists. But then ships were large

¹ Doyle, J. A., The Middle Colonies, p. 8.

^a Jane, K. G., Albuquerque and his Successors, p. 105.

and seaworthy enough to convey women as passengers. Therefore the delay in English action, which Hakluyt deplored, was in the end beneficial; for now families could migrate and form a New England in a climate that compelled exertion. Consequently, as their blood remained pure, and life was of a salutary hardness, the last became first.

For, at bottom, commerce is less important than colonisation. In the ancient world the Greeks eclipsed the Phoenicians, because Greek colonists spread their race far across the Mediterranean, while, except at Carthage, the men of Sidon and Tyre established mere trading posts. In the modern age English men and women followed the Greek example and therefore anglicised most of the temperate regions of the New World; while their earlier rivals, long intent on trading and exploiting rather than on family settlement, hybridised the tropics. Of course, Spanish, Portuguese and Dutch pioneers contributed greatly to the increase of wealth and comfort in Europe; for the incoming of precious metals, spices, sugar, potatoes, and tobacco brightened and diversified the old dull existence. But even these benefits were to be dwarfed by the incomparable boon of world-wide migrations and consequent lightening of the pressure of population within Europe. In short, the future of mankind was mainly to lie, not with the peoples who imported gold and spices, but with those whose women dared to carry overseas that most precious heritage, the family. Well might Adam Smith, in his section on Colonies, assert that "the discovery of America and that of a passage to the East Indies by the Cape of Good Hope are the two greatest and most important events recorded in the history of mankind."

CHAPTER VI

SPAIN, THE WORLD POWER (1580–1640)

"Every nation has its eye on the Indies, with a view to enriching itself and breaking the absolute possession of Spain." (Venetian ambassador to the Doge, Feb. 17, 1609.—Venetian Galendar, 1607–10.)

Maritime enterprise contributed so largely, first to the completion, secondly to the undoing, of the mighty Spanish Power, that we may well consider here the outstanding naval events in this reversal of fortune. The completion of her empire in the New World was due to two of the successors of Columbus, who corrected his strangely persistent impression that Cuba was the eastern edge of Asia. The first who opened out a vista of the true west and south was Vasco Nuñez de Balboa. Landing in Española first merely as a stowaway, he steadily worked his way up until he became the self-made Governor of Darien. In 1513 the boasts of an Indian as to "the other sea" and its vast riches led him to search for those waters. Struggling across the heights, he at last sighted far below the glittering expanse of the South Sea. 1 Keats (though ascribing this exploit to Cortes) has thus vividly pictured the scene:-

> ... "with eagle eyes He stared at the Pacific, and all his men Looked at each other with a wild surmise Silent, upon a peak in Darien."

This discovery was to yield far more than pearls of Panama, and ingots of Peru. Forthwith Balboa annexed to Spain that as yet unimagined expanse; and thus

¹ F. A. Kirkpatrick, The Spanish Conquistadores, pp. 49-53.

the Papal Bull of 1494 led to another extension westwards of the power of Spain. Her sons soon voyaged on that new domain, but it was a malcontent Portuguese who discerned in Balboa's discovery the means of pushing her power westwards to Maluco (the Moluccas), which, along with other Spice Islands, had been acquired by the successors of Vasco da Gama. Ferñao de Magalhaes (Magellan), cherishing a deep grudge against the Portuguese Crown, resolved, in concert with a friend who believed that Maluco was within the Spanish sphere as assigned by the Treaty of 1494, to win that prize for Spain by reaching it through the South Sea. His scheme found favour at Madrid, and, despite many intrigues from Lisbon and jealous doubts in Spain, this brave and experienced adventurer found himself at the head of five ships fitted out at San Lucar, at the mouth of the Guadalquivir river, his flagship, Trinidad, of 110 tons, being the largest; the smallest was the Victoria of 85 tons. In September, 1519, they set sail; but the crews, numbering about 230 (mostly Spanish), soon showed signs of mutiny against this detested Portuguese commander.

His first effort to find a short cut, through that hated barrier called America, to the South Sea was up the La Plata estuary, where the explorer de Solis and his crew had been lured ashore by the natives, only to be killed and eaten. Magellan explored it until the freshness of the water showed that he was in a great river. Realising now the vast length of America, he stayed at St. Julian's Bay from March to August, 1520, and there had to exert his stern will to quell a dangerous mutiny. One ship also foundered while scouting. At length, voyaging on southwards, they sighted an opening which he wisely affirmed that he knew of from the globus of "that excellent man Martin de Boemia" (Martin Behaim). Such is the statement of the Italian Pigafetta who voyaged with him and knew him well.¹ Nevertheless, Magellan sent in two ships, S. Antonio

¹ Pigafetta, Magellan's Voyage (ed. J. A. Robinson), pp. 70 ff.



and Concepcion, to find if there was a passage through. Great was the joy when they returned with cheering and firing of guns to indicate a strait. Passing the first and second narrows (where the tide rises over 40 feet, and flows at nearly six miles an hour)¹, Magellan sighted two openings, and ordered these two ships to scout south-east, while the Trinidad and the Victoria explored to the south-west. The S. Antonio, his largest ship, seized the opportunity to slip away and make off for Spain. With three ships, Magellan struggled on through or past numberless creeks and islets, unable to anchor



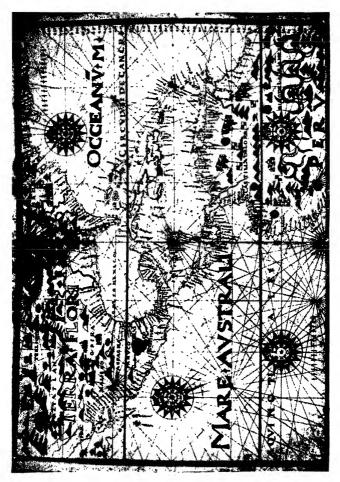
in those deep channels, dismayed by the rushing tides, and puzzled by the signs of smoke on the southern hills; wherefore they called it Tierra del Fuego. Turning at length north-west, they wrestled with winds and windings until, after 38 days of groping through the worst maze ever yet threaded, they felt, as they neared Cape Pillar, the heave of ocean billows. Full of joy, they now (28th November) entered the Pacific, having, as they believed, found a passage between South America and the Great Southern Continent. That ships could enter the South Sea was a mighty discovery, promising to Spain the monopoly of its eastern expanse; for she could close the strait at a score of points.

Unsuspecting the enormous width of the new Ocean, and with scant stores of food, they sailed on to the

¹ C. Darwin, Diary of the Voyage of H.M.S. Beagle (ed. N. Barlow), p. 206.

north-west, helped by the northerly current, which bore them, like every other explorer until Cook, towards the tropics. Near the equinoctial line they sighted two "rich islands," which (says Pigafetta) we took to be Cipango and Sumbdit Pradit.¹ They also expected a speedy landfall in Asia or the Moluccas. Cheered by these illusory hopes, and helped on by the constant east wind of the equatorial zone, they made good time across that vast expanse; but Magellan's former threat, that he would go on, even if they had to eat the leather coverings on the masts, now came true; for even the ships' supply of rats gave out. Finally, after three months and twenty days, they made the Ladrones Islands, just in time to avert starvation. We shall notice later their surprise at the "flying proas" of the islanders; and we must omit all notice of the death of Magellan in a skirmish in the Philippines, the eastward route of the Trinidad until she was captured by the Portuguese, and the homeward struggle of the Victoria under del Cano, with only twenty-two other survivors of this first voyage of circumnavigation. Pigafetta lived on to do justice to the great powers of Magellan-his constancy in the most adverse fortune, his hardihood and unmatched skill in navigation, which alone could have enabled a foreigner to maintain discipline during the worst and most prolonged privations ever recorded at sea. Magellan also did much to confirm the belief in a great South Land. Above all, he accomplished the task in which Columbus failed, that of finding a western sea route to the Indies; for he rounded South America, and his voyage proved indisputably both the link between the oceans and the sphericity of the earth. Of course, it re-opened the dispute between Spain and Portugal over the Spice Islands; but in 1529 this was patched up by the treaty of Saragossa which fixed the dividing line at a distance 2971 leagues east of the Moluccas a ludicrously exact boundary in days when the reckoning

¹ Pigafetta, Magellan's Voyage (ed. J. A. Robinson), p. 89 and Note.



SPANISH MAP OF THE NEW WORLD (ABOUT 1544) (From the Bodleian Library, Douce MSS.)

of longitude at sea was often wildly wrong. In 1543 Spain disregarded the treaty when a Spaniard discovered Mindanao, whereupon she annexed the whole group of

the Philippines.1

So easy was navigation across the tropical belt of the Pacific, and so rich the lands there discovered that other zones of that ocean were long neglected. Thus, only by slow degrees did the Spaniards explore the coasts north of Mexico, and not until about 1540 was Lower California found to be a peninsula, not an island.² Settlements further north were slow, the existence of gold being unsuspected during three centuries. Nevertheless, the immense wealth of Mexico led Spain to claim that continent as appears in the accompanying map, of about 1544, in which Cabot's discoveries and claims are ignored, while only the north-east is allotted to France.³ Later, the Portuguese founded Bahia in Brazil, and turned French settlers out of Rio.

The chief interest centred in the Spice Islands. There, in 1526, the Portuguese had discovered New Guinea (so called from a fancied resemblance to their Guinea in West Africa), and Spanish seamen now explored its northern coasts. In 1565 Spain began seriously to colonise the Philippines, and to plan the discovery of Terra australis incognita—a topic reserved for the next

chapter.

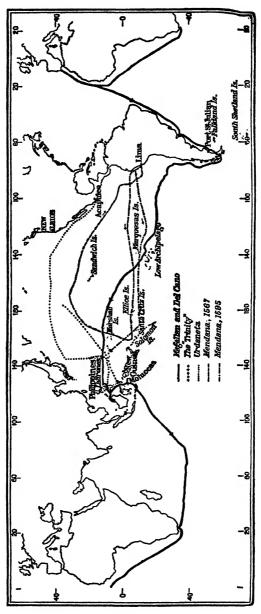
Meanwhile, the conquest of Mexico, Peru and Chile in the early and middle decades of the sixteenth century yielded great store of treasure to the Spaniards, and, when these governments were duly organised, to Spain herself. The results of the incoming of stores of bullion cannot be discussed here, but, if they had been

^a Baker, J. N. L., p. 89.

¹ R. B. Merriman, *The Rise of the Spanish Empire*, III, 446-56. On p. 637 he estimates the total treasure imported from the New World for the Crown of Spain at over 101,000,000 [ducats] down to 1560, but subject to large deductions.

From the Douce MSS. of the Bodleian Library, Oxford.

⁴ See A. von Humboldt, The Fluctuations of Gold (trans. W. Maude, N.Y., 1900); Adam Smith, Wealth of Nations, Bk. IV, Chap. 7, § 3.



EXPLORATION IN THE PACIFIC OCEAN UP TO 1600



PORTRAIT OF DRAKE BY J HONDIUS

wisely used, they might have provided Philip II of Spain (1527-98) with a navy able in time to crush both Dutch and English, and to drive pirates from the seas. Owing, however, to muddling and malversation, the treasury at Madrid was often in dire straits; and German bankers,1 like the Fuggers and Welsers, throve on its needs, recouping themselves from the treasure brought by the India fleets. Trade with the New World was also very strictly controlled, to the advantage of Cadiz, San Lucar and Seville,² and, as always, monopoly brought in its train inefficiency and corruption. treasure fleets, though well guarded, were an easy prize because their place and time of sailing were nearly always known. Moreover, the danger from the growing Turkish and Barbary forces kept much of the Spanish navy tied to the Mediterranean, even after that brilliant but illusory victory of the Christian fleets at Lepanto (1571). Worst of all, when Philip's bigotry drove his Dutch provinces to revolt, their privateers soon began to cut off Spanish reinforcements sent thither by sea. Never, then, was a world-power so harrassed by naval problems; and the Spaniards, who were not naturally apt at seafaring, never could cope with their extraordinary difficulties both in home waters, in the Channel and North Sea, and above all in the Indies. To protect that vast expanse was impossible; and Drake showed his strategic insight, when, in his interview of 1577 with Queen Elizabeth, he assured her that the best way to annoy Philip was in the Indies.3

When that Spaniard-hating son of Devon persuaded the Queen to allow and favour his secret expedition into the Pacific, her last instructions (only of late revealed) ordered him to explore the Pacific as far north as latitude 30° S. of a coast not governed by a Christian prince.

¹ C. H. Haring, Trade between Spain and the Indies, p. xxiii.

² Ibid., pp. 20 ff.

³ Sir J. Corbett, Drake and the Tudor Navy, I, 208.

⁴ See E. G. R. Taylor in R. Geograph. Journal (Jan., 1930); in her Tudor Geography, pp. 110-19; and in Mariner's Mirror, XVI, No. 2; also XV, No. 2.

As Chile was Spanish, this clause pointed to Terra australis incognita; and it seems likely that Doughty, who inclined to Burghley's pacific programme, exasperated Drake, a partisan of Walsingham's warlike policy, and therefore suffered death for treason in St. Julian's Bay, Patagonia. Certainly Drake had long before sworn "to reap some of the Spaniard's harvest which they got out of the earth and sent to Spain to trouble all the earth." And, by striking at her supplies of treasure from the Pacific, he intended to hamstring the giant.

In the main he succeeded. Appealing to the crew of his ship, now re-named the Golden Hind, for absolutely united effort ("I must have the gentleman to haul and draw with the mariner") he entered the dreaded Magellan Straits and threaded them in seventeen days,—a wonderful feat. Thereafter he was driven southward by Pacific storms, until, off Cape Horn, he saw that "the Atlantic Ocean and South Sea met in a most free scope." This discovery was of high value in showing an open alternative route into the Pacific, which therefore Spain could not hope to keep closed to the world, as Magellan and Pigafetta had reported. Absolute security had made the Spaniards of the coasts of Chile and Peru careless; and Drake, striking swift and hard at their ports, and catching five richly-laden ships in the open, secured large booty. Having spread terror even along California, he annexed the coast north of it, calling it New Albion in the hope that England would guard the north-east exit from the Pacific into the Atlantic. Frobisher had lately sought the western end of it in pursuance of Robert Thorne's behest to find a way "to the back side of the new found land and so to the Indies Occidentall."1

Nevertheless, Drake, assigning as cause the cold and gloom which he found at midsummer even in "Drake's

¹ Hakluyt, I, 216.



Bay," put about towards the far richer Spice Islands. At Ternate (one of the Moluccas) he received a rapturous welcome from the native chief who came out with four war canoes to welcome him as a deliverer from the hated Portuguese. (See the scene depicted in the accompanying map.) Again in Java a similar reception awaited him; and thus, ballasted with Spanish bullion and laden with spices, he made his way home with ease, there to enrich his "adventurers" with a dividend of 4700 per cent.² Is it surprising that the Queen (a secret subscriber) knighted him on board the Golden Hind at Deptford (4th April, 1581)? Rightly, he was the national hero; he had shown how readily the resources of Spain for the now imminent war could be cut off and that her vast oceanic preserve could be reached from west or east. How jealously Spain sought to keep it closed to the world appears in this section of the map of the Pacific by Ortelius of Antwerp, dated 1589. It is shown as reached only by the narrow Magellan Strait between South America and the Tierra del Fuego forming part of the great Terra australis. No subject of Spain dared to portray the truth as revealed by Drake. As to the expenses which his venture compelled Philip to incur for the defence of that far-flung empire, a wellinformed Italian estimated them as thrice the cost of the war in the Low Countries.8 That of itself was nearly ruining Spain. In 1607 the Venetian ambassador in France informed the Doge that "the whole of the Spanish power depended on the Indies. cut off from them, the King could not hold out two years, as he had not 2,000,000 a year of revenue," and in November, 1608, the Venetian ambassador in London, in reporting the arrival of the flota treasure of 2,841,331

¹ J. Winsor, in *Hist. of America* (III, pp. 74 ff.), shows that Hondius's sketch of Drake's Bay (see map) is incorrect, and that there are grounds for identifying it with that of (San) Francisco. Others deny this.

² W. R. Scott, Joint Stock Companies, I, 86-88.

⁸ Calendar (Foreign, 1586-88) Palavicino to Walsingham, 11th Sept., 1586.

(ducats) for the King, said that all of it would go to the Dutch War.¹

Meanwhile in 1580 Philip II had had extraordinary good luck. Owing to lack of a legitimate heir to the Royal House of Portugal, he had a passable claim to that throne, and made it good by sending in an army under Alva which easily occupied Lisbon. Thus, he became king of that realm, along with the oceanic coasts of Africa, the East Indies and Brazil—in short all that Portuguese sea heroes, from Henry the Navigator to Albuquerque, had won for their land. During sixty years (1580–1640) Spain held the New World, Oceania, the East Indies, most of Africa and the reversion to the Great South Land. Never since Imperial Rome had one State possessed such power and apparently endless riches for increasing it. Shakespeare may have parodied her acquisitiveness in the vaunt of Ancient Pistol—

"The world's mine oyster Which I with sword will open."2

Well might Walsingham urge the Sultan to attack Philip before he came "to the full pitch of his might and strength."³

Nevertheless, the sudden addition of recalcitrant Portugal to that comparatively recent formation, the united Spanish monarchy, did not make for solid strength. Rather did it add to the elements of discord already powerful in the Peninsula, and still more so in the Italian, Flemish and Dutch provinces, subject to Spain. It soon appeared that the resources of Philip were unequal to the strain of putting down his Dutch "rebels." As is well known, the "Beggars" organised fleets and flotillas for harassing Spanish reinforcements, which owing to the ruinous expense of land transport, were nearly always sent by sea. The Dutch soon extended their

¹ Calendar (Venetian, 1607-10), 21st Feb., 1607; and 3rd Nov., 1608.

² Merry Wives of Windsor (Act II, Scene 2).

^{*} See C. Reid, Walsingham, III, 226, 227.



THE PACIFIC OCEAN BY ORTELIUS, 1,39

raids down and beyond the Channel with results which encouraged English and French privateers also to prey on the commerce of Spain. Her rooting up of French settlements in Florida, and her attempts on ours in Virginia naturally provoked wide-spread resistance to her claims, and when these after 1580 were extended over all the East Indies, the area over which privateers could strike at her was doubled. Indeed, extension of territory and wealth was not a real gain of strength unless Philip maintained a powerful and highly efficient navy.

Now, to gain such a force he must crush the Dutch, control their resources, and if possible gain the alliance of the Catholic League in France. Fear of such Spanish successes induced Walsingham to work hard for the despatch of regular armed help to the Netherlands. In 1585 he won over Queen Elizabeth to his views because Philip, "being possessed of those countries, will attempt somewhat against Her Majesty." Obviously, if he possessed both the navy and harbours of the Dutch, he could threaten England's exposed east coast. Also, if he drove her forces out of Ireland, the Spanish menace from the west would be equally serious. Accordingly the English strove hard to hold Ireland and to prevent his conquest of the Dutch provinces. The promptings both of religion and of common sense urged speedy action before the Dutch and the Huguenots should be overpowered or Philip could organise his world resources. Meanwhile Elizabeth had paid increasing attention to her navy, a serviceable type, that of the Revenge, being ready well before the crisis of 1588. It was of about 500 tons, and carried thirty-four guns beside twelve swivels. The discarding of high fore and aft castles and adoption of deeper keels also gave greater stability and therefore more accurate gun-fire. In fact the Revenge type (forerunner of the Nelsonic seventy-four) was so efficient

¹ See C. Reid, Walsingham, III, 73.

that Spanish seamen pronounced her "worth four of theirs." The good gunnery even of our armed mer-chantmen was seen in July, 1586, when off Sicily, "five tall and stoute shippes appertaining to London" (of the Levant Company) were set upon by "II galleys and 2 frigats of the King of Spain. . . . The Spaniards hewed off the noses of the galleys that nothing might hinder the level of the shot." But even so the bow-chasers of the galleys were overpowered by the broadside fire of the merchantmen, which during five hours lost only two men killed "and another hurt in his arm"; while at the end the galleys and frigates "wanted men to continue the charging of their pieces," and withdrew "with shame and dishonour." The Londoners, on putting into Algiers for refreshments, were received with high honour, the Dey "entertaining them in the best sort." Incidents like this kindled in English seamen an invincible spirit, which bore fruit in 1588. Spaniards, meanwhile, clung to the galley as long as possible, though a dozen events should have warned them of its uselessness in the Ocean and Channel. Consequently, many of their officers and crews were unversed in the navigation and fighting tactics of sailing ships—a fatal defect for 1588, the first great campaign under sail.

The plan of this work precludes any description of wars; but we may note that the attack on England by the Invincible Armada was thwarted, not only by the better sailing qualities of English ships and their superiority in gunnery, but also by lack of sea-sense in the enemy. Philip ordered his nervous admiral, Medina de Sidonia to strive by all means to come into touch with Parma's army of 30,000 men and flotilla at Dunkirk, and convoy it into the Thames estuary. But the westerly wind needed to bring Medina speedily off Dunkirk

¹ Corbett, I, 350, 358, 372. See too his Spanish War (1585-7), p. 115. After Drake's dash on Cadiz, four of his ships "make no account of 20 galleys."

² Hakluyt, III, 359-68; also IV, 383-86, for the repulse of five Spanish galleys by the *Centurion* of London.

would hinder that (unseaworthy) flotilla from getting out of that difficult exit.1 Fortune at first favoured the Armada by bringing it on the wings of a stiff sou'-wester off Plymouth Sound, while Howard and Drake were painfully beating out towards the open; but Medina rejected the more skilled advice to attack them, on the ground that the King had ordered him without delay to join Parma at Dunkirk. So he missed that priceless opportunity, whereupon the English fleet seized it by occupying a position on the Spanish rear (July 21st). Thenceforth for nine days they harried that rear-"a very great advantage (wrote Lieutenant Tomson) for the weaker part; . . . and we so daily pursued them at the heels that they never had leisure to stop until they came within two miles of Calais."2 There fireships dislodged them: they fled towards the north of Scotland, and scarcely one-half saw Spain. What was worldpower when its masters muddled away superior force and favouring fortune in the Channel?

Nevertheless, neither our navy nor army was strong enough to strike at and hold the best post or posts in the Azores, which (so wrote the Venetian ambassador at Madrid) "would be the end of the Indies; for all [Spanish] ships have to touch there." But in 1596, when Philip's army captured Calais, and threatened Kent, the English Navy (for the first time with efficient Dutch help) retorted by a crushing blow at Cadiz, which revealed the weakness of Spain at the heart of her Empire. The loss of Philip's third and last Armada by autumnal storms completely exhausted Spain, and in 1598 he died, a human wreck amidst what then seemed the wreckage of a great empire. In 1594 he had suddenly closed every Portuguese harbour to Dutch traders,

¹ Laughton, Defeat of the Spanish Armada, I, pp. xxxix, 231; II, 147.

^a Ibid., I, pp. xxxix and 345.

⁸ Calendar (Venetian, 1581-91), Nos. 770, 775. So too S. Champlain Voyage to the West Indies, 1599-1602, Eng. Ed., p. 48) states that all ships thence must touch at the Azores "to take their observations else they cannot surely finish their voyage."

thus compelling them to go to the East themselves, and to help England at Cadiz. Their union at sea

foreboded ruin to the world empire of Spain.

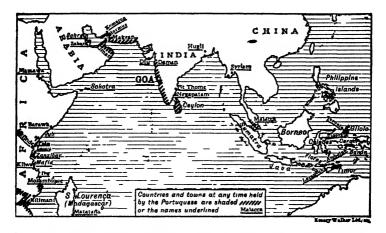
Her decline was postponed by the accession of James I to the English throne—an event which led to peace with Spain and a strange falling-off in our national spirit and seafaring energy. For James and his negotiators so muddled the article of peace stipulating freedom of trade to the Indies that Spain forthwith denied that she ever granted it—a quibble against which James protested in vain, while Lord Salisbury stated that war would be resumed if James were not so pacific.1 The result was that our merchantmen could not safely voyage to the Indies, yet could not attack Spaniards, while the Dutchmen did so with ever-increasing profit. James also called in all our privateers, to the intense disgust of nearly all seamen and sportsmen. Even in 1603 Ralegh pointed out that the Dutch built far better cargo vessels, which were capturing our trade; and by 1616 Monson complained that, owing to our slackness and Dutch enterprise, we had not in the Thames ten ships of 200 tons fit for defence.2 True, we had built a great East Indiaman, Trade's Increase, of 1100 tons; but she disappointed all hopes and we went back to smaller ships, whereas the Dutch now built for their growing East India trade great ships far more seaworthy than the imposing Portuguese carracks.

The man who had most stimulated the Dutch to capture the East India trade of Spaniards and Portuguese was Jan van Linschoten, the Marco Polo of the fifteenth century. Consumed with a desire to travel, this Dutchman had in 1583 sailed in a Portuguese ship to Goa, and spent in all twelve years in the East Indies, noting carefully in his Journal, the trading ways of his employers, from Goa to Java and the Moluccas. Finally, on his

¹ Calendar (Venetian, 1603-07), No. 142; and 1607-10, p. 339.

² Ralegh, W., Trade . . . with the Dutch; W. Monson, Naval Tracts, III, 43¹.

return voyage he observed all the failings on board the carrack, Santa Maria, especially the rigorous separation of duties, "so that, if the ship were sinking, not any of them will do more than belongeth to his charge, and what farther is to be done, they will stand still and look upon it." Other reasons for the many shipwrecks are "the unreasonable lading and charging of the ships, the unskilful seamen and the slack searching of the ships." Eager jealousy between ships leads to undue haste to



forestall each other, which causes their rival, St. Thomas, to run aground near the Cape of Good Hope, and his own ship barely rounds it.¹

The publication of Linschoten's Journal in 1596 nearly coincided with the Anglo-Dutch capture of Cadiz. Both events fired the Dutch with a resolve to win from the hostile Indies the means for conquering their great enemy at home; and, as the Portuguese posts in the east were sometimes slackly held under hated Spanish commanders, the distant prize was then to be had merely for the taking. So every enterprising Dutch or Flemish port now sent forth privateers, soon equipped by local

Woyage of Linschoten to the East Indies, ed. P. A. Tiele (Hakluyt Soc.), II, 23t ff.

East India Companies. Hard on the heels of the English East India Company of December, 1600, came the far more compactly framed Dutch Company. Invested with plenary powers by the States General, it acted for the Dutch Government in the East. Whereas the English Company in 1601-9 despatched in all only fourteen ships, its Dutch rival in 1602-7 despatched sixty-five. In 1605 the Dutch Company seized most of the Moluccas, and in 1607 it paid a dividend of 75 per cent.² The Venetian ambassador reported in December, 1608, that Amsterdam prospered greatly on the Indian Trade and was building for it three great warships. In 1607 the Dutch fleet had beaten a larger Spanish force in Gibraltar Bay; and in 1609 Philip III conceded to that Republic freedom of trade in the East for twelve years. Thenceforth their Governor-General absorbed more and more authority and trade both from their late enemies and their present rivals. The work done by our early seamen, Lancaster and Middleton, at Bantam and elsewhere, was therefore undermined, and the Dutch became more and more masterful. As is shown in Appendix II, they excelled us in establishing intermediate posts which strengthened their hold on the East Indies.

Finally, in 1623, they wiped out our little community in Amboyna, without any protest from James I. Already he had shown his indifference to oversea affairs by refusing to ratify the unopposed annexation of what is now Cape Town by two English captains in 1620; and that post of world-wide importance went a-begging for thirty-two years more, when Van Riebeeck with the Goede Hoop and two other ships claimed it for the Dutch Republic. Meanwhile, in 1639, mastery at sea had been gained by that State when its admiral, Tromp, with some ninety ships, ventured to attack a somewhat smaller Spanish fleet sheltering off Deal under the

¹ D. Hannay, The Great Chartered Companies, p. 89.

Anderson, Origin of Commerce, II, 268.

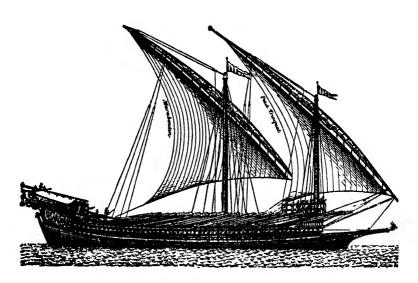
nominal protection of a small English squadron. A shot from a Spaniard gave him the excuse for attacking even in English waters; he sank several ships and drove others ashore, while the rest, in a fog, escaped to Dunkirk (11th October, 1639). This violation of English neutrality (even in one of "the King's Chambers") incensed Charles I, but he was too weak at sea to do anything; it was then patent that the Dutch navy was supreme.1 This heavy blow to Spain probably had some effect in bringing on the revolt of Portugal in 1640, which ended in re-establishing her independence and that of her remaining oceanic possessions. But she had now lost to the Dutch nearly all her East India islands. Indeed, after 1635, when Richelieu pitted the rising power of France against Spain, she was overborne in Europe and became weak overseas.

Such in brief outline is a sketch of the maritime causes of the decline of Spain. It shows a people suddenly raised to world supremacy (largely by the wise guidance of Italian and Portuguese seamen) whose rulers never realised the essential need, either of a great and efficient navy to knit together that sprawling fabric, or of toleration and fair play towards other equally maritime peoples hitherto less favoured by Fortune. While provoking these to arm in self defence, they neglected the one instrument which could enable them to dominate the world. Losing naval prestige in 1588 and mastery at sea in 1596, Spain went quickly downhill, and in 1639 was beaten by the little nation whom she had forced to become a Sea Power.

The rise of the Dutch to naval supremacy is the most remarkable in naval history. It was due to an unequalled combination of determined patriotism, skilled seamanship, organisation in well-knit companies, and keen perception of the best strategic points. After their fortification of Batavia in 1614 they dominated the Far East from that central post, and hence they easily

¹ C. D. Penn, The Navy under the early Stuarts, pp. 256-58.

ousted both Portuguese and English from their islands, and secured points of vantage like Colombo, Mauritius and the Cape. In the New World they occupied the estuary of the Hudson, as well as posts in Guiana, some of the Caribbean islands, and even (for a time) a large part of Brazil. Thus (owing to England's decline under the early Stuarts) the Dutch Republic after 1603 took the lead in breaking up the World Empire of Spain. Thenceforth there came a period when each seafaring people shared in the spoils. Finally, from Batavia as base, the Dutch had for a time the best chance of finding and annexing Terra australis incognita—a theme to which we must now turn.



GALLEY UNDER SAIL (probably about 1600)

CHAPTER VII

THE QUEST FOR THE GREAT SOUTH LAND

"A Continent is wanting on the South of the Equator to counterpoise the land on the North, and to maintain the equilibrium necessary for the earth's motion."

(A. Dalrymple, 1767.)

THE idea of a great southern continent floated into human imagination among the ancient Greeks. It originated about A.D. 50 with a philosopher, Pomponius Mela, who fashioned a conversation between Midas, King of Phrygia, and Selenus, son of a godlike nymph. This superman told the King that, far away from all northern lands and Libya, there was "a continent, or parcel of drylands which in greatness was infinite and immeasurable," inhabited by men of twice our stature dwelling in mighty cities. Other thinkers had placed this continent in far off seas. For Plato it existed as Atlantis, far out beyond the Pillars of Hercules. But, as geographical knowledge spread, later philosophic sport transferred it to the almost unknown Southern About A.D. 150 the geographer Claudius Ptolemy, champion of the sphericity of the earth, located that continent to the south-east of Asia, and pictured it as spreading thence westwards until it joined an eastern claw of South Africa, thus hemming in the Indian Ocean by a land balancing that of the northern hemisphere. easily did philosophers evolve continents, as the sun throws off planets. My aim here is to trace briefly the unveiling of the real southern world.

The Arabs, the greatest seamen of the Dark Ages, were not influenced by these Greek or Hellenistic fancies. Voyaging about the Indian Ocean as far as

Madagascar and Mozambique in the south-west and Java in the south-east,¹ they knew that its expanse was vaster than Ptolemy's theory allowed. But farther than those points they did not venture, for, as Marco Polo stated, the strong southerly Mozambique current roused their fears as to the impossibility of return—a motive which in sailing times always hampered exploration in the zones of constant winds or strong currents. Therefore the far southern seas were probably untraversed by white or brown men until the time of Vasco da Gama. And he and Diaz found the Hottentots of the South African coast unversed in navigation.

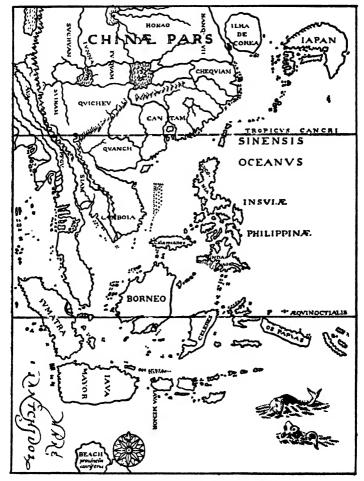
After the dreary time of the Dark Ages the first great impulse to southern discovery was given by the medieval traveller, Marco Polo. He seems to have known about Ptolemy's Southern Continent, and, by pointing the way to great riches, he started the search for it. He and his brother travelled widely in the East, especially in China and the Malay lands, remaining there during the years 1272–1294. Being keen business men, they learnt all that was possible from Arabs, Malays, Chinese and Japanese, and described the wealth of these last. Thus, their travels incited adventurers to attempt the Atlantic crossing in order to get quickly and easily at the fabulous stores of gold in Cipango (Japan).

But they also initiated the quest for Java, the Spice Islands, and a great continent beyond. To reach Java was not difficult, because the Chinese voyaged thither in great ships having but one deck, one "good helm," "four masts and as many sails," also thirteen bulkheads or divisions in the hold. They were manned by crews of 200 or 300, could be worked by sweeps or large oars, four men apiece, and regularly brought back cargoes of pepper from the Spice Islands. Of these, the chief was Java, which Marco Polo thought "the greatest

¹ Beazley, C. R., Dawn of Modern Geography. (I regret that limits of space preclude any survey of Arab voyagings.) See Admiral E. A. Ballard's work, Rulers of the Indian Ocean.

island in the world," having "a compass of more than 3000 miles," possessing great stores of spices and metals.

Some 500 miles to the south-west of Java was a great



LINSCHOTEN'S MAP OF EASTERN ASIA

country called Locach (or Beach). It was "on the mainland," and around it was land abounding in gold; while at the same distance beyond was an island named

Pentam; and then 100 miles farther still a very rich island called Java the Less.¹

Here was news to excite the imagination. For geographers saw that none of the early navigators had found Polo's great continent. Martin Behaim's globe of 1492 shows the influence of Marco Polo in cutting up the great South Land of Ptolemy. Martin stated that he based his globe on Ptolemy, Pliny, Strabo and Marco Polo. But Ptolemy's great South Land now appears as a string of great islands south-east of Africa and south of Asia, while those continents bend towards each other so as partly to enclose the Indian Ocean. As we have seen, the voyages of Bartholomew Diaz and Vasco da Gama round the tip of Africa disproved this last statement of Ptolemy, and also made it clear that no South Land approached near South Africa. This discovery of open sea beyond its southern capes tended to discourage the hopes of discovering a habitable southern continent in that quarter. Nevertheless, the idea of a great South Land persisted, as may be seen in sixteenth-century maps like that at the end of this volume. In them the south-east of the Indian Ocean is sprinkled with islands and is fringed on the south with a continent bulging or pointing northwards somewhere to the south-east of Asia, and therefore conforming to what Marco Polo had said about Locach. Java Minor, etc.

In the East Pacific the first noteworthy discovery was that of a Spanish pilot, Juan Fernandez, who in 1563, during one of his voyages between Peru and Chile, sighted the beautiful island named after him. Of it he gave a glowing account, which was confirmed by later voyagers. But far more startling were his statements as to finding to the west, about latitude 40° S. a great land: "very fertile and agreeable, inhabited by white people, mighty well disposed, of our stature, well

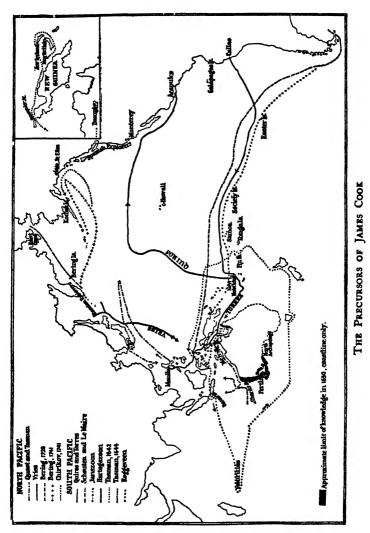
¹ See editions of Marco Polo by Sir H. Yule (1926) and N. M. Penzer (1929); also *Proceedings of the Brit. Academy*, Vol. XX.

clothed, peaceable and civil." He returned to Chile, keeping this discovery a secret, but hoping to return and claim it. Death intervened before he could do so; and his secret sank into oblivion. Such is the story. Though accepted by believers in the Great South Land, down to the time of Dalrymple (from whose account I have quoted), it seems incredible, apart from the supposition that this land formed part of a continent, to the west of Juan Fernandez, which has been submerged. This theory has found supporters, the chief being the late Dr. Macmillan Brown in his Riddle of the Pacific (Easter Island).

We now turn to the West Pacific. Passing by the vague and resultless efforts of de Gonneville and other almost unknown French explorers of the southern seas,1 we come to those of Spaniards which are both well substantiated and important. It was natural that they should make the first determined effort; for Spain had annexed the Pacific, and it was hopefully believed that Magellan's Tierra del Fuego stretched westwards to the islands reported by Marco Polo near the two Javas. Moreover, the Portuguese were encroaching on that sphere from Great Java, and Spain must forestall them in what would be a great and profitable quest. Accordingly, in November, 1567, Mendaña, nephew of the Governor of Peru, set sail from Callao in the King's ships, Capitaña (150 tons) and Almirante (107 tons) carrying some 150 men. His course was west-southwest towards the expected continent; but after long gropings in a landless sea, discontent grew apace, and he was induced to turn north-west. Still no land was seen, until in January he stumbled on the Ellice Islands. Thereafter, the easterly wind and current bore him along quickly, until, on 7th February, he "sighted a long tract

¹ There is no satisfactory evidence that they sighted Australia, though, on the strength of de Rotz's chart of a south land (1542) dimly like it, Messrs. Major and Collingridge accept those French claims. More probably it was the work of some imaginative student who sought to picture Marco Polo's narrative. (So thinks Dr. G. A. Wood, in *The Discovery of Australia*, Chap. 6.)

of land, and we thought it must be a continent because it was so long and high." He named it Santa Ysabel;



it is the central island of the Solomon Group. At once there came out long pointed canoes, of "the shape of

a crescent moon." In them were swarthy men (part of the great Melanesian family), who paddled with incredible speed, even overtaking the ships under full sail. Keen in bartering, even more so in thieving, they proved to be keenly jealous of all inland exploration. Hence the search for gold led to many scuffles. Also the reefstrewn coastline bristled with dangers, which induced the crews to build a small brigantine (finished in 54 days). Even so, the risks were incessant, and the discoveries of several small islands brought many costly skirmishes but no compensating results.

Finally, as the pilots reported the ships to be wormeaten, Mendaña set off for Peru, but by a more southerly route, only to be compelled by his men to head north-east for California. After an exhausting roundabout voyage of eleven months (nearly thrice the time of the outward voyage) they reached Callao, having in all lost fifty men. The official report declared the Solomons to be of little importance, without gold, silver, or merchandise, though it might be well to settle part of them, "make slaves of the people," and so prepare "for the discovery of the mainland, where it is reported there is gold and silver and people clothed." Nevertheless, in sailors' talk the Solomon Isles were stuffed with gold enough to fit the name and turn all thoughts thither.

Jealous intrigues at Lima and Madrid blocked Mendaña's efforts at colonising his discovery. Indeed its position was first obscured and then forgotten. Not until 1595 did he set sail from Peru with four ships and 368 emigrants (including women and children), his chief pilot being Quiros, of unhappy renown. Disputes, which multiplied during the voyage, and the sight of new islands, threw out his plans. Nevertheless, he

¹ See narratives of Mendaña and others in Lord Amherst's edition of *Discovery of the Solomon Islands* (Hakluyt Soc.), I, 109; II, 227; and I, p. xxii and II, p. 376, 406 for plates of the canoes; also G. Friederici, *Alvaro de Mendaña*, p. 96 for later outrigger canoes.

² Wood, p. 138.

discovered the important Marquesas Group and noted there the great stature of the natives and their large canoes with double outriggers to assure stability. He also met far out at sea a large double canoe (of this type also more in the sequel).¹ Thereafter, he failed to find the Solomons owing to obscurantism in Spain and the very defective means of finding longitude. Yet on his way he made some discoveries, including that of the fertile Santa Cruz island of volcanic origin. Greed and immorality there led to violence and murders; and the death of Mendaña and other officers broke up that settlement. Two ships were now lost outright; but Quiros with the two others reached Manila and thence Mexico, where he stated his belief in a great continent to the south of the groups now discovered.²

Thus, the first efforts at finding and colonising the Great South Land ended in utter failure; and the losses in women and children probably discouraged emigration of Spanish families. All that heroism and suffering had led merely to the discovery of islands near the equator, especially the group of the much larger "Solomons." The fate of these last is curious. Spanish officials obscured their very existence, and map-makers plotted them at will about the Pacific, "from 2400 to 7500 miles west of Peru."3 In proportion to their deepening mystery so rose their value in sailor-talk, until they overshadowed the Great South Land. Bougainville anxiously sought the group and touched at two of its islets, but knew not his good fortune.4 In the next year Surville discovered six islands of the group, but (equally ignorant) named it "Land of the Assassins." Dalrymple and Cook declined to identify

¹ G. Friederici, in Petermann's *Geograph*. *Mitteilungen*, Heft 5/6, p. 138, with other proofs of Polynesian activities then. They declined later.

² Ibid., pp. lxvii-lxx; also Sir C. Markham, Voyages of Quiros (Hakluyt Soc.); Beaglehole, J. C., Exploration of the Pacific, pp. 76-96.

⁸ Markham, *Ibid.*, p. lxxii.

^{&#}x27;I pass over as ill-founded his claim that in 1503-04 de Gonneville of Honfieur sighted the Southern Continent in the East of the Indian Ocean.

these islands with Mendaña's "Solomons"; but that identity was established by a French geographer Buache 1781. And, soon after, the French navigator, d'Entrecasteaux, while searching for unfortunate La Pérouse, lifted the veil which had fallen on them for nearly three centuries. In this period the Solomon islanders living their own isolated life, had in no wise altered; and little change has occurred since then, excepting the adoption of outrigger canoes, and a marked decrease in the population. Lord Amherst and Mr. Basil Thomson in their Introduction to the original Spanish narratives conclude "that human progress is dependent upon constant impulses from other races of mankind; and that, left to itself, a people will stop at the point where it was cut off, and thereafter remain stagnant."2 A similar conclusion seems applicable to the Pacific groups which lead an isolated existence; for they differ greatly from islanders which have long had trade relations with other even distant groups.

Religion prompted the zealot Quiros (1565-1615), chief pilot in Mendaña's second voyage, to undertake a southern crusade in order to convert the myriads with whom his imagination peopled the Great South Land. Church authorities supported his pleas, which were finally granted by Philip III of Spain. His instructions stated that "there could not fail to be either a continental land or a number of islands from the Straits of Magellan to New Guinea and Java and the other islands of that great archipelago," also that the South Land would be easier to find than "the Western Indies." After long delays Quiros sailed from Callao on 21st December, 1605, in the Capitaña, along with Luis Vaez de Torres, as second in command in the San Pedrico (80 tons), and a small zabra or pinnace. Torres was

¹ For this wide and complex subject see Essays on the Depopulation of Melanesia, ed. W. H. R. Rivers (Cambridge, 1922).

^{*} Amherst, I, pp. lxxii-lxxvii.

³ Sir C. Markham, Voyages of Quiros (Hakluyt Soc.), I, 167 ff.

loyal to Quiros, but not so two officers, de Bilboa and de Prado, who stirred up discontent against that saintly

and not always capable chief.

Holding firmly to a west-south-west course through calm but landless waters for some 800 leagues, Quiros then met southerly winds and a great swell from the south which, along with the want of supplies, obliged him, in accord with the general demand, to turn to the westnorth-west. He thus missed a good chance of sighting New Zealand, but gained more genial latitudes and a favourable wind and current. They sighted some islets, but mutinous signs appeared in the Capitaña until Quiros deposed the chief pilot, de Bilboa. Finally, after a long favourable run in latitude 11°S. they made Taumaco, one of the Duff group. Its inhabitants proved to be friendly and active, voyaging far in large sailing canoes, and having knowledge of about forty to sixty islands, with some of which they had feuds.2 The native chief also assured him that there were fertile and populous lands to the south. Voyaging on southwards in search of "the mother of so many islands," Quiros at last sighted an extensive land, with a fine natural harbour (1st May, 1606). In holy exultation he annexed it, naming it "Australia del Espiritu Santo."

But soon all went awry. Their search of the interior of the supposed continent (it is part of the New Hebrides), added to their zeal for conversion, aroused native hostility. On board also disputes waxed hot, and the crew got out of hand. As Quiros lay ill, the Capitaña was handled so slackly in a gale that, at midnight of 11th June, she drifted out to sea, and at daylight could not be seen by her two consorts. At the mercy of his now mutinous crew, Quiros perforce sailed northwards towards the island of Santa Cruz, and then made for either the Philippines or Guam. Thus ended his efforts to find the great South Land. In miserable straits he reached

¹ Sir C. Markham, Voyages of Quiros (Hakluyt Soc.), I, 192. Torres here differed sharply from his chief (*Ibid.*, II, 456).

² Ibid., I, 227; II, 460. (See map of the voyage ad fin. Vol. II).

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Mexico, then Peru, and finally died in utter poverty at Panama in 1615. "With him (writes Mr. Major) died the naval heroism of Spain."

Meanwhile, his officers, Prado and Torres, had continued the search for the Southern Continent, and with notable results. Prado, in his Relacion recently discovered, describes their voyage westwards in a way which varies from the accepted narrative of Torres; for, on the strength of sealed orders which he produced, he at once took command of the vessel, though he seems to have left nautical matters to Torres. The two accounts agree both as to the need of making for Manila, and their approach to the maze of islands and shoals which prolongs the eastern end of New Guinea. As a gale prevented their coasting along its north-eastern side, they skirted its southern coast during five days.

Then, says Prado, they sighted some lofty islands like sugar-loaves, and, sending in a boat, discovered in latitude 10\frac{1}{2}\circ S. a good inlet which he called Port Lerma and annexed to Spain. After a fight with the "Indians" they sailed on past large islands and then discovered a good bay, termed San Millan, next, further west, three more islands; and then again they skirted "the great land," (New Guinea), which they named Magna Margarita on account of its big pearl shells. They then turned south past many islets; and in latitude 10° they reached an "isle of dogs," and next a maze of islands: "We counted forty, all situated among the shoals." These last prevented them reaching "the great land." Thereafter they toiled slowly through other islands and shoals, but finally "found more water and so went out towards the north." There, in latitude 8½° they saw a cape (False Cape) of "the great land" and soon they found deep water all along its coast.2

¹ R. H. Major, Early Voyages to Australia (Hakluyt Soc.), p. lxxvi.

² I have quoted from the *Relacion* as given by Mr. H. N. Stevens in *New Light on the Discovery of Australia* (1930), pp. 71-73, 133-165; and Torres's account from Major, *Early Voyages to Australia*. See the *Geog. Journal*, Vol. 76, p. 252—for a discussion of this evidence.

As for the narrative of Torres, it is far briefer but clearer. He states that, after coasting along the fertile shores of New Guinea for some 450 leagues, and when in 9° S.: "We could not proceed further for the many shoals and great currents, so we were obliged to sail out south-west in that depth to 11° S., and the bank goes lower; there were very large islands, and they seemed more on the southern part, inhabited by very corpulent black people, naked. . . . We went along on this bank for two months, at the end we were in 25 fathoms deep, in 5° S., and ten leagues from the coast, and having gone 480 leagues here the coast goes north-east." So, after this terrific struggle among the islands and shoals of the strait now named after him (though strictly it should be called Prado Strait), Torres again coasted along New Guinea to the western tip, whence there was an easy run to Manila.

I have quoted those parts of the two narratives which bear on the question: did they sight and annex the northern tip of Australia? Both records agree that they threaded the maze of islands and shoals southwards at least as far as 10° S. (Torres says 11°). The former would bring them only half-way across the strait, but 11° would bring them further south than the latitude of Cape York, and well down what is known as Endeavour Passage. In it they would probably sight the Cape York Peninsula; but they seem not to have landed on it. And no annexation is there mentioned by Prado, who had annexed all desirable points. Surely he would have annexed that peninsula if he had deemed it part of the Southern Continent. Both of them were by this time intent only on escaping from that death-trap and regaining the coast of New Guinea.

In any case, whether Prado and Torres sighted Cape York or not, the now highly enterprising Dutch had just forestalled them. For in November, 1605 (i.e., a month before de Quiros left Callao), a Dutch vessel

sailed from Bantam to discover the south of New Guinea. Unfortunately, there is no contemporary account of this voyage of Willem Janszoon in the Duyfken; but a later account shows that he coasted far along the south of that great island. Then, apparently, he met with great difficulties from a maze of islands and shoals which compelled him to put about southwards somewhere near the west end of Torres Straits. Unwittingly he crossed the mouth of those straits, believing them to be a bay; and his landfall was on the Cape York Peninsula; he now sailed southwards along a coast which he still thought was New Guinea, and struggled on as far as latitude 133° south, where he resolved to turn back. Naming a cape Keer-Weer (Turn-again), he put about for Java, thinking that he had discovered a southern extension of New Guinea—a delusion which prevailed until the time of Cook. Such is all that we know about this voyage. The names Duyfken Point and Cape Keer-Weer still recall this first discovery of Australia by a white man, early in 1606. It was an unpromising beginning, for the land was mostly bare and desert, but "inhabited in some places by wild cruel black savages, who killed some of the crew: for which reason [they] could not learn anything of the land or waters, as had been desired of them." Of the next Dutch expedition to this gulf nothing is known, for the account of it was lost.

Meanwhile the Dutch had also broken into the Pacific. Little of note was accomplished by their first circumnavigator, van der Noort, in 1598–1601. But in 1615–16, Schouten and Le Maire made a determined effort to find the Southern Continent, also to break the monopoly of the Dutch East India Company over all trade east of the Cape of Good Hope. They succeeded

¹ The official Instructions issued by Governor Van Diemen to Tasman in 1644 describe Janszoon's voyage, probably from official records. Mr. E. Heawood, in his *Geographical Discoveries of Seventeenth and Eighteenth Centuries* accepts it as proven.

in passing through what they called Le Maire Strait, separating Tierra del Fuego from an island which they named Staaten Land. (They deemed it part of the Great South Land.) They then doubled Cape Horn, naming it after Hoorn, the birthplace of Schouten. Thereafter, the northerly current and great southerly swell bore them northwards to Juan Fernandez, whence they turned westwards, hoping to find the great fertile land which that Spanish pilot had described as not far away to the west. On 24th March, 1616, when 460 leagues West of Peru, "they looked out eagerly for the southern land, but almost despairingly, and fearing there was no such land." Still, they sailed on westwards with the favouring east wind, and discovered some islands of the Low Archipelago and beyond. Also in mid-May they sighted far out at sea a native double canoe, such as will be described in Chapter IX. had on board some twenty-five people, including women and children, and probably was bent on emigration, for it made off to the south-east. Finally, after coasting along the north of New Guinea, they reached Java, only to have their ship confiscated as interlopers on the Company's domain.

A little later (1616) West Australia was sighted by Captain Dirck Hartog in a Dutch ship, the *Eendracht*, when driven out of his course in the voyage from South Africa to Batavia. He found "various islands, which were, however, uninhabited." One of them is still called Dirck Hartog's Island, and the land opposite was for a time known as Eendracht's Land. Eighty years later a Dutch captain, Willem de Vlamingh, was sent to explore this land, and he found a common pewter dish nailed to a pole, and bearing the names of Hartog and sub-officers engraved upon it. This interesting relic is in the State Museum at Amsterdam. Meanwhile, slow progress was made in the exploration of the Gulf of Carpentaria (as it came to be called). In 1619 a ship called the *Arms of Amsterdam* sailed along part of

this gulf, but again some of the crew were murdered by natives, and the ship sailed away.

By 1622, Coen, the masterful Governor of the Dutch East Indies, had resolved to clear up the mystery of the land which was believed to be the southern part of New Guinea, and also of the low-lying western coasts recently sighted by a Dutch ship, the Leeuwin, which were thought to be part of Marco Polo's auriferous land, Beach or Locach. Now two ships were to sail from Java along that western coast and push their discoveries even as far south as latitude 50°; then to return northwards and finally east, i.e. towards the great gulf, exploring as far as their provisions and water would allow. The two captains were to record carefully everything of importance—the character of the peoples, their mode of government, their religion, but especially their trade, industry and wealth. They were also to annex the land, erecting stone columns stating when they took possession of it. Clearly, Coen expected to add to the Netherlands the trading resources of the great South Land, which he still believed to be civilised and wealthy.

The result was the expedition of 1623 made by Jan Carstenz and Willem J. van Colster, who approached the great gulf from the north-west; and, as happened to Janszoon in 1606, they thought Torres Strait to be a bay "into which they had sailed as into a trap." They too believed the north of Australia to be New Guinea; but on turning back to the west they discovered "Groote Eyland," and the country still called Arnhem Land.¹ Carstenz named a river to the south of Cape Duyfken, Carpentier River after the Governor-General of the Dutch East Indies, whose name lives on in the Gulf of Carpentaria. Carstenz's report of the land and the natives of that gulf was so bad that no one cared to connect it with the great and glorious Southern Continent.

¹ Heeres, J. E., Part played by the Dutch in the Discovery of Australia (1899).

Thus, little more was done in that direction till the time of the greatest of Dutch explorers.

Abel Janssen Tasman is an almost unknown man, and no portrait of him is to be trusted. The dates of his birth and death are alike uncertain. Probably he was born about the year 1603 at Luytjegast in the province of Groningen. He learned to write, and, later, is heard of as a "common sailor" living in Amsterdam. In his thirtieth year he went out to Batavia in the service of the Dutch East India Company, and became skipper of a coasting "yacht." In 1639, he and Quast sought for a wealthy land east of Japan, but failed, though he gained a reputation for seamanship, but also for close-fistedness with his crew, and harshness towards natives. (See map on p. 128.) These qualities,

however, were then the rule in his calling.

The legend of gold-producing Cipango having now been exploded, all interest centred in the Great South Land. Accordingly, in August, 1642, Anthony Van Diemen, Governor-General of the Dutch East Indies, drew up instructions for a great survey of the South Pacific, evidently based on the Memorials of Quiros, and the plan of Coen and the advice of a skilled Dutch pilot, Frans Visscher. He aimed at "discovery of the remaining unknown part of the territorial globe, situate in the south, and presumably as large as the Old and the New Worlds." For this scheme Tasman was chosen as executant. He was to proceed from Batavia, first to Mauritius (so called by the Dutch after their great Prince, Maurice of Nassau, when they occupied it in 1598); then sail southwards even as far as 52° or 54° to get the west trade-wind, and thereabouts discover "the unknown South Land"; also find out whether in high latitudes there was a track to Spanish South America. If he failed in these quests, he might make for the east end of New Guinea, and then sail north-east to the much coveted Solomon Isles. Or again, he might coast up the northern shore of New Guinea (not the southern one,

which was vaguely believed to be very dangerous) and then from its western end turn southwards and follow the track of Janszoon as far as Cape Keer-weer, exploring as far west as Eendracht's Land in order to find a channel into the South Sea. This last instruction of course implies complete ignorance of Torres Strait—a discovery which the Spaniards had kept secret. Finally, Tasman was expected to reach Eendracht's Land between May and July, 1643, i.e. in nine to eleven months after starting. Everywhere he must open up trade with the new lands found on the way, treating the natives well and not annexing them without their consent. He was also to keep "an ample and elaborate journal," from which (though it not long after disappeared) a government official compiled an exact but very lifeless narrative. Visscher was chief pilot and adviser.

Tasman's ships, the "yacht" Heemskirck and the "fly-boat" Zeehaen, neither of which was adequate to the work, sailed to Mauritius, and then made for high latitudes, finally reaching 49°4" south. There he reported "dirty, misty, gusty weather, with hollow waves out of the south-west and south so that we could not conceive there could be any land very near." Later, they found "their compass would not stand still as it ought"; so they guessed "there was here some mines (query deposits) of loadstone, for that their compass stood not still on any of the eight points." However, it steadied shortly before they sighted land ahead. He named it Anthony Van Diemen's Land. They reckoned their longitude as 163°50', which was 18°50' out—a mistake excessive even in those times.

The weather being stormy, they rounded the south of that land and stood northward into a deep bay which they named Prince Frederick Hendrick's Bay, after the then head of the Dutch Republic. Landing on the shore they heard the noise of men who were unseen. Tasman describes the sound as like that of a Jew's trump or little gom, but he saw nobody. Clearly, the

local Calibans were twanging on some kind of Jew's harp, but not of metal, for they were still in the Stone Age. Tasman also saw gum on several trees and gum lac on the ground. He marvelled at two giant trees about 12 to 18 feet thick, and 60 to 65 feet high up to the lowest branch, with steps cut into them for climbing. "These steps," he writes, "were about five feet asunder, so that we must either conclude these people very great, or else that they have some unknown trick to make use of the said steps for climbing these trees." They stayed in that bay only five days, and then, after planting the Company's staff and the Prince's flag, they sailed off due east to make longitude 195°, and then stand north to find the Solomon Isles. With "hollow waves of the south-west," which told of open sea to the south, they sped on, and after eight days, sighted "a large high-lying land."

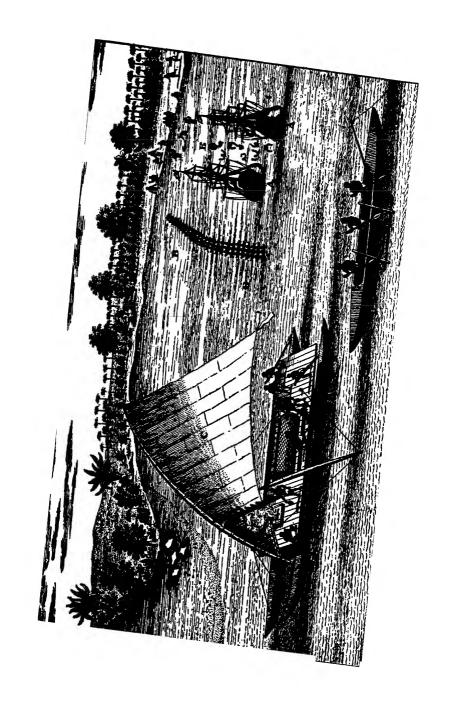
It was a mighty discovery—nothing less than the south island of New Zealand. They sailed north along the coast, and, rounding a cape, came to anchor in a bay (16th December, 1642). Forthwith two canoes paddled out; the crews hailed them with rough shouts, and then "blew on an instrument which made a noise like a Moorish trumpet; in answer thereto we blew ours." On the morrow many natives paddled out and seemed likely to come on board. The Zeehaen then lowered a boat; but (so runs the official account) "not having any arms with them (they) were set upon by these natives and three or four of them were killed, and the rest saved themselves by swimming." The ships fired at the murderers who, however, got clear away. Surely it was a mistake to lower a boat, which was thus at the mercy of large swift canoes. Thereupon, Tasman sailed on northwards until he entered what seemed to him a great bay, the coasts of which appeared fair and fruitful. Nevertheless, as the wind was squally and unfavourable, he did not explore this gulf, though the tide, running strongly from the south-east, might have warned him

of a strait ahead. Had he waited for calmer weather he might have sailed through the channel which was to be named after Cook. After the north-west squalls the wind backed south-east, and Tasman decided to run towards the north-west—a luckless move which took him along the almost harbourless coast of the north island of New Zealand. At last the two ships came "to the north-west cape of this land" and had hollow waves out of the north-east, "and therefore they doubted not there must be a great sea in the north-east, whereupon they were glad as having now gotten a passage."

Obviously, Tasman regarded this surf-beaten coast, inhabited by cruel savages, as an unwelcome barrier; and now that he had open sea to the east and north-east he resolved to proceed eastwards, and then make for the islands discovered by Schouten. The two crews needed refreshment, for "upon New Zealand they had not so much as once been ashore." They therefore now landed on an island near by, naming it "Three King's Island," because they anchored there on Twelfth Night. Then, calling the cape after Maria van Diemen, wife of the Governor-General, they sailed away to the north-north-Such was Tasman's peep at New Zealand. evidently hoped that the land he was just leaving was a projecting mass of the Great South Land and perhaps connected with the Staten Land of Le Maire, east of Tierra del Fuego. Indeed, in Tasman's Journal, as also in a map drawn by Visscher, only the name Staten Land is given to New Zealand.2

Tasman was now occupied solely in finding a way towards South America. If his chief aim was to find the South Land, would he not have sought to establish its connection both with Van Diemen's Land and with Staaten Land off South America? Instead, perhaps owing to the wind, he steered north-north-east, that is, away from the South Land. In due course he sighted

¹ It is marked so in Jacob Visscher's map of "New Guinea."
² See Major's Early Voyages to Australia, p. xcvii.



some islands of the Tonga group, where he found the natives as friendly as Cook did. Two of them he named after Amsterdam and Middleburg (see Plate). Next, he sailed north and then west, and at length narrowly escaped shipwreck on a dangerous reef east of the group called by him Prince Willem Islands, now known as the Fijis. He did not anchor there because "we could find no roadstead on account of the numberless banks and reefs that run out to sea from all these islands." His course was now northwards "in order to keep clear of the coast of New Guinea"1—a singular error, for it was above 1000 miles distant. With persistent ill-luck he missed the Solomon Isles by going a little too far north, but he sighted, near New Guinea, an island now called New Ireland. Finally he coasted along the north of New Guinea, passed the Moluccas, and, skirted the south of Celebes, reached Batavia on 15th June, 1643.

He was thus well up to time; for Van Diemen had given him up to July, 1643, to reach Eendracht's Land. Was not the Governor unwise in fixing so early a limit? Signs of haste are clear in Tasman's proceedings. should have spent more than five days in Van Diemen's Land, if only in order to discover more of the country and people. His glance at New Zealand was still more cursory; for he did not even land on it, only on Three Kings' Island near its northern cape. Therefore he could merely guess whether this fine land was part of a continent or consisted of one or more islands. murder of a few sailors by the natives was no sufficient cause for hurrying from the next sheltering bay. Thus he missed a great opportunity, probably owing to Van Diemen's rather exacting time table. An explorer of new seas should never be hurried. Off the Fijis the reefs and rough weather prevented his landing, and he brought back practically no information about any

¹ G. C. Henderson, The Discoverers of the Fiji Islands, Chaps. 3, 6.

islands, for which he has been severely and perhaps

unjustly blamed.

Though disappointed with Tasman's performance, Van Diemen despatched him again on a supplementary search of more limited and definite scope. With two ships and a pinnace he was to proceed along the south of New Guinea, enter its "shallow bay" (really Torres' Strait) and explore its southern part, the object being to discover "whether Nova Guinea is one continent with that Great South Land or separated by channels and islands lying between them; also whether that new Van Diemen's Land is the same continent with these two great countries or with one of them." Further, he was to find out whether "this land is separated from the unknown South Land, a fact which might easily be ascertained from the heavy and slow swell of the seas." If there were a channel down that great bay (of Carpentaria) he must pass through it, and also find out whether Van Diemen's Land were an island. In short he must now solve the mystery of the South Land.1

These instructions reveal the wide sweep of Van Diemen's imagination as well as the accuracy with which he pieced together the fragments of information that came in from southern voyagers. Evidently his was the brain behind all this work of exploration. Tasman was an executant about whose views we know little; for, unfortunately, his journal of this second voyage, of 1644, has disappeared. But a letter written by Van Diemen to the Directors of the Company at Amsterdam gives a bare summary to this effect:-(1) Though no open channel was found between New Guinea and Eendracht's Land, Tasman discovered that the gulf to the south [Carpentaria] was very large, but utterly unpromising as regards trade. (2) After coasting round this gulf, Tasman proceeded past Arnhem Land towards Eendracht's Land nearly as far as Shark's Bay and then turned and went home to Batavia. (3) There-

¹ Major, pp. 47 ff.

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upon Van Diemen stated that Tasman had sailed round this new land.

This last assertion is incorrect. Tasman had coasted along it only from the east of Cape York Peninsula round the Gulf of Carpentaria and then westwards and southwards as far as Shark's Bay. True, he had in 1642 coasted along about one-third of Van Diemen's Land, but he had not established the identity of this last with the land along which he had coasted in the north and west during his second voyage. Again, Van Diemen received Tasman coldly, for the second voyage was as disappointing as the first in regard to the primary object, trade. It is also surprising that Tasman did not push on beyond Shark's Bay. If he had sailed on until he came to Van Diemen's Land, he would have made an epoch-marking discovery. But, for some unknown reason, he turned back long before he came to the south-west corner of Australia. Therefore the claim that he circumnavigated Australia is without foundation. The Dutch East India Company (intent on large profits) also began to tire of profitless explorations.

Nevertheless, Tasman's fame, though less as an explorer than as a navigator, stands high. In his first voyage he opened up the South Indian Ocean and the South-West Pacific Ocean in a way that had never before been thought possible; and he dispelled the legend of a great land south of the Indian Ocean. Also, if his second voyage was disappointing, the cause may be found either in his instructions as to time, or in the state of his ships or crews, or in the difficulty of getting provisions and water in the inhospitable coast of New Holland on its worst side. The fact is that we know next to nothing about the difficulties with which Tasman had to contend. So we must relegate him and his doings to the sphere of the half-known; and he left the problem of the Great South Land of the Pacific unsolved. He

died in Java about the year 1660.

To sum up:—The Spaniards and Portuguese (under the same government from 1580 to 1640) had the best chance of solving the South Land problem. But they were hampered by friction on board ship between the two rival elements, by intrigues at Madrid, also by the avarice, and often the corruption, of Spanish Governors in the New World, which infected the officers of exploring ships, and produced indiscipline or even mutinous outbreaks. These causes contributed to wreck the voyages of Mendaña, Quiros and Torres; the last was the final great exploring effort put forth by Spain; for she now felt the drain of long struggles with English and French and the ruinous war in the Netherlands. By 1640 the Dutch were at the height of their naval power. But this was due, in part, to the temporary weakness of France and England and to Spanish blunders. Therefore, it now declined owing to the three great naval wars with England, soon followed by the grave danger of conquest by the mighty land power of Louis XIV, which compelled them to turn their energies landwards. Consequently their maritime activities lessened, just as, under similar military pressure, other small and enterprising maritime peoples had lost their pre-eminence at sea. Thus, Phoenicians, Greeks, Northmen and Danes, Venetians and Genoese, Portuguese and Hollanders were in turn overborne by the overwhelming mass of the hinterland. Thenceforth the race for the Great South Land lay between the English and French.

CHAPTER VIII

DAMPIER, BUCCANEER-NATURALIST

"The voyage of the *Beagle* has been by far the most important event in my life and has determined my whole career."

(Charles Darwin, Journal.)

THE age which follows that of Tasman witnessed no maritime explorations of outstanding interest; and, as we have seen, this falling off may be explained by the career of Louis XIV. His threatening ascendancy, like that of Napoleon I, compelled the maritime peoples to turn to the defence of their homes; and this centripetal tendency only by slow degrees yielded to expansive efforts such as peace alone can bring. In that dull interval, when Mars eclipses Neptune, we may turn aside from tame generalities to follow the fortunes of a sailor-philosopher, whose journal lights up both the rough seafaring life of his age and its gropings after Natural Science. As my aim is to illustrate origins and early developments in human progress, it is apposite to note the work of a seventeenth-century Odysseus, who was a rough-and-ready precursor of Banks, Solander, Forster, Humboldt, and Darwin.

Among the faces in the National Portrait Gallery that of William Dampier challenges special attention. The lofty brow and dreamy melancholy eyes are those of a thinker and sentimentalist; but the prominent nose and the humorous-cynical mouth, buttressed by a projecting under lip and chin, bespeak the man of action, perhaps the fighter. Framed in a wealth of black hair, the countenance is both appealing and baffling; for the upper half is that of a philosopher or artist, while the lower promises daring and persistent activity. Perplexing

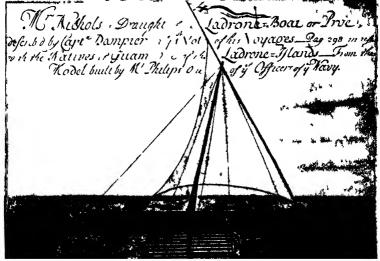
dualism is the impression conveyed by the whole face, which seems to look forth bemused, asking: "Who am I?" -"At what shall I grasp next?" Clearly the painter, Thomas Murray, felt his sitter to be an enigma. And well he might. For the book which Dampier holds in his hand is his New Voyage round the World (1697), which this quondam buccaneer dedicated to the Earl of Halifax, President of the Royal Society, and one of the Lords of the Treasury. Was there any more singular literary event in that conventional age? Hence the immense popularity of the work, four editions being required within a few months. Never since the time of Drake and Ralegh had an Englishman written so piquantly about the marvels of the world. It is the glory of Dampier that, near the end of the reign of William III (a time of waning enthusiasms), he should have aroused that love of sea-adventure and sea-lore which has often heralded a revival of national spirit and enquiry.

In truth, his book is a prose Odyssey. It breathes the sense of wonder at the strange world of the two Indies and of the vast southern void—witness that resolve of Dampier and his buccaneer comrades, after leaving the Philippines, "to touch at New Holland, a part of Terra Australis Incognita, to see what that country would afford us." What blissful ignorance! How far it excels our mapped-out omniscience! His was the happy lot, not to be conveyed round the world in a perfectly organised tour, but to zigzag and gyrate across it during a decade with a band of buccaneers, then the only means of

globe-trotting.

In this age of methodical exploration, we marvel at the slow progress of the post-Columban age. Apart from the lines of the chief oceanic trade-routes, little was done in the century that separates Drake and Dampier to solve the riddle of the vast verges of the oceans. In the main this slackness arose from three chief causes:—
(1) the long succession of religious, dynastic and civil





wars in Europe, which exhausted nearly all nations; (2) the mad rush for precious metals in the New World, which incited the rivals of Spain to seize her treasure galleons; (3) the comparatively slow progress in the improvement of ocean-going ships, which were too comfortless and unseaworthy to promote the growth of humdrum honest trade. This needs security at sea and a steady demand on land, conditions unknown in that warring age, in which gold was still the one compelling

magnet.

It is indeed questionable whether the discovery of the New World (due mainly to the gold urge) did not bring with it almost as many curses as blessings. Spain did not really benefit thereby. And when Drake turned aside (as we now know) from what ought to have been the major aim of his expedition (the opening up of trade with the Southern Continent), in order to plunder Spanish ports and galleons from Paita to Manila, his fabulous profits set the fashion for a century. Raiding made for more war: war bred privateers: and privateers bred pirates. Such was the vicious circle wherein mankind seemed doomed for ever to gyrate.1 truth, piracy at sea was deemed as natural as robbery in a forest. It had always been so in the ancient world. Not only Polyphemus but even that model King of the Phaeacians, Alcinous, asked the new comer, Odysseus, whether he was a trader or a pirate. And Thucydides noted that, so soon as the Greeks developed sea-borne trade, they turned to piracy.2 The two callings were inter-changeable, from the time when the Phoenicians "traded in the persons of men," to that of Chaucer's ruffianly shipman of Dertemouth.

Much to his credit, young William Dampier, son of a Somerset farmer near Yeovil, when he felt the call of

¹ See Venetian Calendars (1619-21), p. 357, where Lando reports to the Doge on 10th August, 1620, the number of fierce young English Pirates infesting home waters—"the seed from the sowing of Queen Elizabeth."—What if they had seized the *Mayflower*, and drowned the Pilgrim fathers and mothers!

² Thucydides I, ch. 4.

the sea, drifted only by slow degrees into buccaneering.1 Who were the buccaneers? Originally they were daring adventurers of the Caribbean who rose against the crippling authority of Spain over the New World. Joined by lawless spirits, they sometimes seized other ships, and raided other towns, than those of Spain. But in the main they were unauthorised privateers who waged guerilla war against her. Hence they differed from pirates, the enemies of all men. Morgan, the greatest of the English buccaneers, finally became governor of Jamaica. In short, the buccaneer, considered legally, was a privateer acting without commission against the enemies or deadly rivals of his country. At need he could declare that he "had forgotten his commission." So said a pert young buccaneer, when captured and challenged by a Spanish officer; and the plea was actually accepted.2 Further, Spain persistently sought to expel all our logwood-cutters from the Yucatan and Honduras coasts; and this action drove the expelled men to buccaneering until finally logwood-cutting won the day and led to the foundation of British Honduras.8

After settling in Jamaica Dampier's roving spirit led him through many phases, from the management of a plantation to the fo'csle of a coaster, thence to the logwood-cutters of Campeachy Bay, and finally to a band of buccaneers (1676). Freedom from monotonous drudgery in the logwood swamps and hope of seeing strange lands prompted the last change; for even during his toils in the swamps he found time to keep a journal

¹ The Dampier family was in Somerset early in the sixteenth century. Captain William Dampier (1651-1715) was born at East Coker near Yeovil. Other branches were settled near Bruton; one of them produced Thomas Dampier, Dean of Durham, whose son became Bishop of Ely. From other branches are descended Sir William Dampier, Sc.D., F.R.S. and Admiral Dampier, C.M.

² C. H. Haring, Buccaneers in the W. Indies (Chap. VI); C. Wilkinson, William Dampier, p. 35.

^{*} See Archives of Brit. Honduras, ed. Sir J. A. Burdon, I, pp. xiii, 64-67, etc.; Camb. Hist. of Brit. Empire, I, 246.

recording all that he saw of animals, birds and reptiles. He also penned an account of a terrible storm. This event turned his attention to the subject of winds, on which he finally gained enough experience to write the best treatise ever yet compiled, thus gaining a place

among the early meteorologists.

A short visit to England in 1678 served only to deepen his longing for strange lands; and, though for a time he again joined the logwood-cutters, yet poverty and the longing for adventure threw him in with a band of buccaneers who had resolved to raid the Spaniards in the South Sea. When mishaps and consequent disputes broke up the band, Dampier joined the minority, which (after a peaceful vote) had to give up the ship and struggled back in a boat and two canoes to the Isthmus of Panama. There, while in peril from the Spaniards, they found their two "Moskito" Indians of high service; and Dampier adds a vivid account in his Journal of that small but very manly tribe, living between Cape Honduras and Nicaragua, which managed to survive the attacks of other Indians owing to fine physique and wonderful skill in hurling the lance and barbed harpoon. Trained from childhood (he writes) they are experts in shooting with these weapons and at warding off arrows—

"provided two do not happen to come at once. They have extraordinary good eyes, and will descry a sail at sea farther, and see anything better, than we. Their chiefest employment in their own country is to strike fish, turtle, or manatee. . . . For this they are esteemed and coveted by all privateers; for one or two of them in a ship will maintain 100 men. . . . They do not love the French, and the Spaniards they hate mortally: they behave themselves very bold in fight and never seem to flinch or hold back. . . . I could never perceive any religion nor any ceremonies or superstitious observations (sic) among them, being ready to imitate us in whatsoever they saw us do at any time. Only they fear the devil, whom they call Wallesaw, and they say he often appears to some among them, who our men commonly call their priest. . . . They marry but one wife, with whom they live till death separates them. . . . These Moskitos are in general very civil and kind to the English, of whom they receive a great deal of respect both when they are aboard their ships, and also ashore. . . . They will have the management of themselves in their

own little canoa, which our men could not go in without danger of oversetting; nor will they then let any white man come in their canoa, but will go a-striking in it just as they please: all which we allow them. . . . They have no form of government among them, but acknowledge the King of England for their sovereign. They learn our language and take the Governor of Jamaica to be one of the greatest princes in the world."

Was there ever, up to that year 1681, a more vivid and fascinating sketch penned of a savage but kindly little community? How the Moskitos survived by sheer skill and courage, amidst hostile Spaniards and other far larger Indian tribes, is here deftly suggested by Dampier; and his descriptions of native tribes (followed and greatly amplified by those of Cook) did much towards beginning the science of ethnology. Dampier also brings out one of the best of English traits, that of respecting natives and not interfering with their customs. Clearly, those buccaneers (or "privateers," as Dampier prefers to call them) had their good points. They were gentlemen compared with Odysseus and his crew, who wantonly massacred the men of Ismarus on the coast of Thrace and then raped their women. Dampier, though he never brags about it, had the true Odyssean flair for finding out how men live. Thus, after landing in the Isthmus of Panama, he and his comrades won over a hostile Indian by slipping a sky-coloured petticoat over his wife; whereupon she talked him into friendliness, and he furthered their march across the isthmus. Despite help from the natives, it took them 23 days.² Thereafter they joined some French buccaneers, whom Dampier calls "the saddest creatures ever I was among" for laziness. These they soon left in order to join a Captain Wright, who had taken a Spanish vessel; but the new captain gave them little fighting and much cruising between the isthmus and neighbouring isles.

Dampier could therefore enrich his journal with

^a Dampier's Voyages (ed. Masefield), I, 45, 53, 64 ff. (I now quote from this edition.)

¹ The early form of "Moskito" is "Mesikito"—see a despatch of 1671 in Sir J. A. Burdon's Archives of British Honduras, I, 51.

varied notes, e.g. that one Indian tribe was so often plundered as to be cowed and mean, while another, far more numerous, was fierce and aggressive, using blow-pipes with poisoned darts. Or again he notes the way in which the Moskitos in their frail canoes chase, harpoon and then tire out and haul ashore great manatees, or sea-cows, of 600 lbs. weight . . . The birds about Aves Island interest him, from the swift man-ofwar bird, that swoops down on a basking fish, spears it on its long beak and then soars aloft, to the slow heavy land-bird, the booby, which "is a very simple creature and will hardly go out of a man's way. Their flesh is black and eats fishy, but are often eaten by the privateers." Touching at several islands and then the coast of Caraccas on the Main, he describes the cacao and other trees, and regrets that the Dutch have all the trade, and the English none. In the voyage northwards towards Virginia he describes the sucking-fish, and rightly surmises that it is the remora of the ancients a proof of his wide reading in natural history. spending thirteen months in Virginia he and a few comrades joined a party of "privateers" under a leader, John Cook, who had recently overpowered their French captors and so now possessed a "ship of good force," mounting 18 guns. With these adventurers Dampier left Virginia in August, 1683, and they made for the coast of West Africa. Here his narrative is very brief, and the late Sir John Laughton, on the strength of Dampier's notes in the Sloane MSS. (British Museum) accuses the party of seizing at Sierra Leone a Danish frigate of 36 guns. As to this Dampier's published narrative says nothing. Indeed, it deals thenceforth almost entirely with things seen, not with things done. Thus, at the Cape Verd Isles "most inhabited by Portuguese bandits," he describes chiefly the habits of flamingoes and pronounces a dish of their tongues to be "fit for a prince's table."

¹ Dampier's Voyages (ed. Masefield), I, 70-80.

Doubling Cape Horn without great difficulty, they made for the uninhabited Isle of Juan Fernandez, meeting on the way a ship under Captain Eaton, whom they joined. At the island they were delighted to find a Moskito Indian, "Robin," whom by accident they had left behind there in 1681. One of the same tribe, whom they now had on board, ran to meet the marooned man, threw himself down before him, and then was lifted up and similarly honoured and embraced. same hearty greetings followed for them all, and "Robin" took them to a great meal of goats' flesh he had hurriedly prepared on seeing the ship stand in. Is he not the original of Robinson Crusoe's man "Friday"? Herds of wild goats (descended from those left there by the discoverer) thenceforth yielded them abundant food; and they found in this lovely island plenty of seals and fish, besides luscious plants and grasses that cured their scurvy. All this Dampier describes with gusto. After sixteen days they went on with strength renewed, and his narrative soon made known the importance of the island for crews weakened by the struggle to round South America. Their next important halt, the uninhabited Galapagos Isles, lying on or near the equator, yielded an equally rich field for observation, for the rainfall is plenteous and animal life abundant, especially in land and sea turtles. Of the latter Dampier distinguished four kinds; and he compared them carefully with those he had observed elsewhere.

We may note here that variations in types in the Galapagos were to arouse the interest of a far greater observer. Charles Darwin, during his long voyage in H.M.S. Beagle (1832-6) noted there strange variations from similar types in South America, and inferred thence the great influence of isolation. He noted later that it was these cases "which chiefly led me to study the origin of species." Thus it was to scientific

¹ Life and Letters of Charles Darwin, I, 65; III, 159; Diary of Voyage of H.M.S. "Beagle," ed. N. Barlow (1933).

observation during a long voyage that we owe the theory of evolution. The debt of science to sea explorers would furnish materials for a book. But we must hurry on, merely noting that Dampier was the first voyager who set men thinking on Natural History and Meteorology on large lines.

On the death of Cook, Davis was chosen captain; and he and Eaton long harried the neighbouring Spanish coasts. Peace with Spain in the Pacific was unthinkable, for her monopoly there was alike despotic and weak.



STATUES OF EASTER ISLAND

Of all men Dampier hated most the Spaniards of the New World, for "they are too proud to be seamen, but use the Indians for all these offices." (Anson's chaplain, Walter, in 1743 reported their "indolence and unskilfulness" as seamen.¹) Therefore the buccaneers (now reinforced by others) gained some surprising successes, and in the matter of a singularly unequal exchange of prisoners took a lofty tone with the President of Panama, informing him by letter that "wee are the commanders of the whole South Seas." The threat

¹ Anson's Voyage, Bk. II, Chap. 10.

of hanging all Spanish prisoners at the yardarms "wrought powerfully"; for the President at once released the two Englishmen and received "about forty prisoners

in exchange."1

Finally Dampier decided to leave Davis and join Captain Swan because he was about to cruise "to the northern parts of this continent of Mexico... and then pass over to the East Indies, which was a way very agreeable to my inclination." A further inducement was that Swan privately assured him that he intended there to give up privateering and take the first opportunity of returning to England. Thus, now, as always, Dampier's actions were decided by a desire to extend his knowledge and then utilise it.

The cruise along the peninsular coast of California, though disappointing to the crew, fired Dampier with the hope one day to "find a nearer way hither than we came; I mean by the north-west," for "such a passage may be found," and, like Drake, he believed it should be attempted from the Pacific to the Atlantic. For this belief he gave sensible reasons which may have led Captain James Cook to make that very attempt a century later. For the present, Swan's plan was with their two ships to cross the Pacific in the zone about 15°-12° north, where the easterly trades are constant; but several of his crew feared that "he would carry them out of the world." Also the privations caused by that long voyage (31st March to 21st May, 1686) led many to cast envious eyes on the stout frame of Swan, who later remarked to Dampier (then thin from disease): "Ah, Dampier, you would have made them but a poor meal." Well was it, then, that the easterly wind held good up to their objective, the Island of Guam in the Ladrones, their best whole day's run being 216 miles.2 The legal food therefore just held out.

¹ Dampier's Voyages, Masefield's Ed., I, 207.

² See I, 297 and 298 for his full table (he allows 60 miles to a degree of longitude).

Like all navigators he pronounces Guam a paradise after the long wastes of sea; for it grew "rice, pine apples, water melons, musk melons, oranges and limes, coconuts, and a sort of fruit which we called bread-fruit," because the islanders baked it into bread. In 1743, Anson's crews, then at the neighbouring island, Tinian, greatly preferred that bread, so that "no ship's bread was expended in that whole interval." He too found the Ladrones infinitely refreshing after the long wastes of ocean, and even the very sick "soon began to feel the salutary influence of the land"—a suggestive remark.¹ Dampier praised the coco-nut for its varied uses, and waxed enthusiastic about the hardy athletic natives and their chief invention, the double-ended out-layer (outrigger) canoe. "I do believe they sail the best of any boats in the world." Also (he notes) as Pigafetta had done), that the natives take great delight in them.²

Swan declined to molest the Spaniards in the Ladrones; but the crew "being very squeamish of plundering with a licence," longed to reach the Philippines, where the natives were at war with Spain, and the chiefs might give them a licence! In their chief island, Mindanao, Dampier admired the position and strength of the capital Manilo (Manila), also the wealth of the whole island in gold and fruit-bearing trees and shrubs, especially the libby (sago tree), nutmeg, bonano, and plantain; he pronounced the last "the king of all fruit, not except the coco itself." His full account of these trees and plants and of all objects of trade first revealed to English people the varied opportunities for honest trade in the Pacific and Far East, which the Spaniards and Dutch then monopolised. He found the native Filipinos very anxious for Englishmen to settle there, and he too thought that course far better than "the other loose roving way of life," besides opening up commerce for

¹ Anson's Voyage, Bk. II, Chap. 2.

² Dampier's Voyages, I, 308-10. See Chap. IX for a full account of them. The plan on page 148 is taken from the plate in Mariner's Mirror, XII, p. 17.

our nation. The Spanish settlers themselves were eager to deal with us, and Dampier notes that "they will smuggle (as our seamen call trading by stealth) as well as any nation I know." The natives also were ready to trade; they had built vessels for the coasting trade, also "canoas" larger than those of Guam, but very low in the water and with outriggers on both sides. Their great desire was to trade with us because they disliked both Spaniards and Dutch.¹

Never was there a better opening for English trade; and, as Dampier pointed out, on the route thither from Cape Horn, we should light upon "that vast tract of Terra Australis which bounds the South Sea (and) is yet undiscovered." Indeed Davis told him he had sighted it some 500 leagues west of Chili. If Davis, Swan and Dampier had had their way, they would have opened up the trade route direct between Cape Horn and the Philippines, thereby forestalling some of the discoveries of Wallis, Bougainville and James Cook by some eighty years. But the debauchery of the crews, and the slackness of Swan marred everything; and, finally on 14th January, 1687, they made off without him and three dozen others.

Dampier's story now deteriorates; for even buccaneers need some discipline, and, after many robberies afloat and ashore by "the mad crew," he sought to escape from them to any English "factory" (settlement). After barely riding out a typhoon off the Chinese coast, they touched at Formosa; and the high lands and very deep seas thereabouts set him thinking about the connection between these phenomena.² At Timor they gained good refreshment and then made for New Holland. Of this desolate land, despised by its Dutch discoverers, he writes naïvely that all he is sure of is that "it joyns neither to Asia, Africa nor America." It proved to be

¹ Dampier's Voyages, I, 317, 343, 355, 363. The above is one of the first instances in writing of the use of the word "smuggle."

^{*} Ibid., I, 325 ff.

forbidding enough—sandy wastes, worthless scrub, poor fauna and flora, and the natives of that King Sound coast "the miserablest people in the world," living on shell fish and roots, unable to catch the manatee and turtle because they had no boats, "canoas or bark-logs." Off that coast, infested by sharks, a drove of men were seen "swimming from one island to another." None of them showed any interest in the ship, and, when offered clothes, they "grinned like so many monkeys": in fact they "differed little from brutes." Such was the Terra Australis of age-long dreams. Unable to escape in such a land "to some English factory," Dampier with two others finally gave the buccaneers the slip at the Nicobar Islands (May, 1688); for he had noted that escaped mariners were not badly treated if they showed the natives a new toy or knack. His confidence in some Sumatrans there was justified; and, though their native outrigger canoe upset, he managed to swim ashore with his beloved journal and some "drafts of land which I much prized."1

The rest of his adventures must be passed over. He reached England in 1691. For some unknown reason he did not publish his journal, with his own additions, until 1697. That year was opportune, for in it came the victorious Peace of Ryswick, which rendered the English and Dutch safe at home and masters of the seas. In 1696 Duquesne's work: A Voyage to the East Indies, had shown what the French might do if victorious; but now that danger was for the time past, and English credit and commerce, long languishing, speedily revived and sought new outlets.² Thus Dampier's book stimulated Englishmen almost as much as that of Linschoten had encouraged the Dutch a century earlier. Indeed, in the next fourteen years there appeared some fourteen collections of travels, "the beginnings of a second great

¹ Dampier's Voyages, I, 450-73.

⁸ Anderson, Origin of Commerce, II, 634. For French exploits in the East Indies see C. La Roncière, Hist. de la Marine française, pp. 100 ff.

period of travel literature." And this, in its turn, stimulated seafaring.

Further, in that age of the fresh young growth of Natural Science, the accumulation of knowledge about man and the world was of prime importance; and, not long after the publication of Dampier's work, Montague, now Earl of Halifax, introduced him to the Earl of Orford, First Lord of the Admiralty, who suggested to him another voyage of exploration. Dampier recommended the discovery of the Terra Australis, as being the largest tract of land still unexplored, and offering no cause for jealousy to other Powers.²

Accordingly, in January, 1699, he sailed in command of H.M. sloop Roebuck (12); and, touching at Bahia and the Cape of Good Hope, reached New Holland near Shark's Bay (latitude 25° south) in September. There everything on land and in sea was repulsive, the only surprising find being that the maw of a large shark contained part of the head and bones of a hippopotamus. The names Shark's Bay, Dampier Archipelago, Dampier Land, and Buccaneer Archipelago, recall episodes of

his two voyages.

Thence he sailed northwards for Timor, an island "indifferent fertile." Near the west end of New Guinea he found islands and mainland abounding in water and fruit, while the natives were ready to barter; they tilled plantations and had canoas with outriggers on both sides in which they paddled far. Early in 1700 the Roebuck rounded the west end of New Guinea and coasted eastwards along its northern shore. The natives hereabouts were fine lusty fellows, some having canoas, but the others "dug-outs" with outriggers on one side. All gave them an uncertain reception.

Further east he sighted a fertile land which he named

¹ See W. H. Bonner, *Dampier: Buccaneer-Author* (1934) for the influence of Dampier on Defoe, Swift, etc.

³ Masefield's Ed., II, 325.

^{*} Ibid., II, 427.

New Britain, his most important discovery. There the natives, until scared by guns, were hostile, but the land seemed well watered and rich. Coasting round it into Dampier's Passage, he proved it to be an island, having "as many rich commodities as any in the world." This statement exaggerated both its size and value; but his own ill health and the discontent of his crew, as well as leaks in his ship, compelled a somewhat hurried return. Indeed the *Roebuck* foundered from sheer rottenness at Ascension Island, but they all reached shore, and, after five weeks' recuperation on turtle and goats, were rescued by four English ships (8th April, 1701).

The voyage did not fulfil his programme; for he had hoped to coast along New Holland and the islands between it and New Guinea, also perhaps to look into the strait, which he believed to exist between these two lands, leading into the "East Sea"; finally to "see what New Guinea afforded," especially as to "men and other animals, vegetables, minerals, etc.," and then "return home by way of Tierra del Fuego." In part the failure was due to the badness of his ship and crew; but also to his nervous and sensitive temperament, which consorted ill with the rough "tarpaulins" of that age. Nevertheless, in all his voyages he added to the knowledge of the peoples, fauna and flora of the tropics; also of the chief winds, so that his Discourse on Winds has been judged by Sir John Laughton (a severe critic of Dampier) to be "even now deserving of close study." The modest author described it as "a rude and imperfect beginning of what may better be done by abler hands hereafter."

Fortune, once his ally, finally frowned on him. In two more voyages he effected nothing noteworthy. Yet the fickle goddess smiled on him once even in these years of increasing gloom (he died a poor man in 1715). In his last voyage, when acting only as pilot to Woodes Rogers, they rescued Alexander Selkirk after being marooned

¹ Masefield's Ed., II, 525-44.

four years in Juan Fernandez. "He was clothed in a goatskin jacket, breeches and cap, sewed together with thongs of the same"; and he answered their questions "in a strange stumbling voice." A writer with only a tithe of Defoe's genius could scarcely fail to weave out of this incident an immortal romance, which has attracted myriads of English lads to the sea.

Thus, in several ways Dampier's acts and writings exerted a remarkably wide influence.1 For he lived at a time when the outer world was unknown or dimly known; when also the sciences were in their infancy; and to them he contributed materials of great interest and value. Moreover, in those stormy times, maritime exploration was impossible except in warships or bucaneering craft; and the latter hovered about at will, while the former went straight to some mark and then "homed it." Therefore, from the time of Odysseus to that of Dampier, exploration and piracy went naturally hand in hand. And what the greatest of Greek poets first did through the romance of Odysseus towards awakening the sense of wonder in the world overseas, that also, in a humbler way, was accomplished again by a young Somerset farmer in simple convincing prose. Above all, it breathed not only love of wild Nature, but also sympathy with savages. Whereas early voyagers had often sought to cow them by musketry, Dampier showed that they could, and often did, respond to kindly treatment; and later experiences, especially among the Polynesians, often confirmed his belief. Thus, by degrees, there grew up the eighteenth century cult of "the noble savage." He was no mere figment of the imagination. He derived from living men. Among them may we not count Dampier's "Robin"?

¹ E.g. on the voyages of Clipperton, Shelvocke, etc.

CHAPTER IX

EARLY MAN IN THE PACIFIC

The most wonderful feats of navigation ever accomplished by man must remain but dimly known; for the Polynesian and cognate peoples who spread over the Pacific Ocean have left no records whatever; and their pedigrees and legends, handed down from generation to generation, are of doubtful value for the early periods to which those migrations are ascribed. Professor Buck, an expert on this subject, thus sums up:—

"The family pedigrees dating from an immigrant ancestor, and covering from twenty-two to twenty-six generations, are fairly reliable as oral records and may even be extended to thirty generations. The migrational period extending beyond this is confused and contradictory. Its use as a chronological basis for dating historical events must be treated with care and reservation. . . . Chronological dates based on genealogies and traditions must increase in error the further they go back in time. Also the dates formerly assigned 'must be treated as an approximate sequence in time.' "1

The conditions that caused migrations leading to the spread of the race have been thus explained. Occasionally, canoes would be carried away by storms and perhaps drift to other islands. But these accidents would probably happen only to canoes at some distance from shore, in which case they would not be likely to have women on board; for these, as a rule, went aboard only for inshore fishing in the lagoon. As migrants who peopled new islands must have taken their women with them, they would have made preparations for a long voyage. That is, their migration was planned, either because of overpopulation, or strifes at home, or sheer love of adventure—a potent spur to search for new homes. Seeing also that none but hardy men and women would

¹ Summary of his Communication to the R. Anthropological Institute, in Man (August, 1933).

survive lengthy voyages, these alone must have sifted out the best material, especially for testing transits like those to New Zealand and Hawaii.¹

The extraordinary difficulties besetting those early migrants in their open canoes may be illustrated briefly by the nearest parallel case which has been recorded. This is the oceanic voyage of Lieutenant (later Admiral) William Bligh in an open boat. As is well known, he in 1789 commanded H.M.S. Bounty on a voyage which had as its object to take from Tahiti plants of the bread-fruit tree for propagation in our West Indies. But the long sojourn in that demoralising island so far undermined discipline that, when nearing the Fijis, the crew mutinied and cast adrift him and eighteen loyal officers and seamen in an open boat, with little food or water, no chart and no firearms. Evidently, the scoundrels intended to compass their death by drowning, starvation or by the cannibal Fijians. They nearly succeeded; for, when Bligh put in at Tofua Island to procure more food and water, the natives, seeing his helplessness, attacked his men and killed one. This proof, that the natives thereabouts respected only force, decided Bligh and his men, beat up against the easterly trade wind (then blowing hard) and make for the not very distant island, Tongataboo, and thence the now doubtful Tahiti (1470 miles further east), but rather to scud before the gale and so run on westwards past the Fijis, New Hebrides, and through Torres Strait in the hope of reaching the Dutch island of Timor, some 3600 miles distant. As Bligh had been navigating master in the Resolution during Cook's third voyage (soon to be noticed), he knew something about the Central Pacific, as also from reading Cook's discoveries; but even so, the chances of survival seemed a hundred to one against them.

¹ See E. Best, *The Maori Canoe*, in (Bulletin 7 of the New Zealand Dominion Museum, Wellington, N.Z., 1925). He also gives valuable accounts and illustrations of other Pacific canoes and early voyages.

overcrowded open boat, with no protection against sun or spray, their small supply of food and water, and lack of a chart or firearms, put them approximately on a level with the early Polynesian migrants, who were, however, more hardened to tropical conditions and shortness of food and water.

I now quote typical extracts from Bligh's log after the departure from Tofua on 3rd May, 1789:—

"They all agreed to live on an ounce of bread per day and one gill of water. . . . I bore away across a sea where navigation is dangerous and but little known, and in a small boat 23 feet long from stem to stern, deep loaded with eighteen souls, without a single map and nothing but my own recollection and a general knowledge of the situation of places, assisted by an old book of latitude and longitude, to guide me. . . . Our stock of provisions consisted of 150 lbs. of bread, 28 gallons of water, 20 lbs. of pork, 3 bottles of wine, and 5 quarts of rum. . . . A few coconuts were in the boat and breadfruit; but the latter was useless. It was about 8 o'clock at night, when I bore away under a reefed lugforesail, and, having divided into two watches, I got the boat into a little order. . . . At daybreak the gale increased. The sun rose fiery and red, a sure indication of a gale of wind. At 8 it blew a mere storm, and the sea run very high so that in the hollows the sail was becalmed, and, when on the top of the sea, it was too much to have set; but I was obliged to carry to (sic) it, for we were now in very emminent (sic) danger and distress, the sea curling over the stern of the boat, which obliged us to bail with all our might. A situation equally horrible, perhaps, was never experienced: our bread was in bags getting wet. . . . Fortunately the carpenter had a good chest in the boat. I therefore fixed on it to put the bread in the first favourable moment. . . . I now served a teaspoonful of rum to each person (for we were very wet and cold), with a quarter of a bread-fruit, which was scarce eatable, for dinner. . . . This day was very severe: it blew a storm from north-east to east-south-east. The sea run higher than yesterday. . . . We could do nothing more than keep right before the sea, in the course of which the boat performed so wonderfully well that I no longer dreaded any in that respect. . . . The nights were very cold, and at daylight our limbs were so benumbed that we could scarce find the use of them." He again served out some rum and stood west-north-west towards "Fidjee," and at noon sighted an island: then divided five small coconuts for dinner, which satisfied all.

On 5th May the gale moderated to a wind from south-east and they

¹ The boat had two pole-masts, carrying lug-sails: her beam was 6²/₂ feet and depth 2²/₂ feet.

saw other islands, eleven in all. He steered west-north-west all night under a reefed fore-topsail; they breakfasted on a few pieces of yams found in the boat. Distance 95 miles. The islands are probably "Fidjee," the larger ones fertile and inhabited.—"For dinner I served some rotten bread and a gill of water. Our wants are now beginning to have a dreadful aspect." 6th May. Saw two high islands; served two coconuts for supper and two for breakfast; stood in towards another island (but did not land), sighted a large and lofty island [Viti Levu].—"I dare not land for fear of the natives, having no arms. We are under spare allowance, a gill of coconut milk, and the meat of the nut about 2 oz. this day. . . . Many reefs are about and dangerous." (Two large sailing canoes chased them, but in vain.) 7th May. . . . "I suddenly got on a shoal bank of coral and sand, which had only four feet of water on it without the least break. . . . Had I been in a ship I should certainly have been on it."

At dawn of 8th May they sighted two large islands (the chief of the Fijis), and when the current carried them near the shore, were again chased by two large sailing canoes, which, thanks to their two sails and hard rowing, they finally left behind. Thunder and heavy rain enabled them to catch six gallons of water in the spread out sails.—Cold squalls; served out a teaspoonful of rum and bit of bread per man; failed to catch a shark and flying fish: again canoes chased them, but gave it up. Cold rains came at night, but the sunshine revived them.—"A gill of water and 2 oz. of bread a day will support us until I get further relief. The lands I have passed consist of a group of fourteen or sixteen islands, three of which are considerable." Bligh was the first to describe the Fijis as a large and important group—a fine piece of log-keeping during a desperate fight for life.

On 15th May he sights islands which he thinks are known (they are probably part of the New Hebrides) but dares not land. Severe hardships befall them during the next ten days and nights. When shivering from the foam and cold he bids the crew at dawn wring out their clothes in salt water, which warms them as the sun rises. On 23rd May the heavy seas 'keep us bailing all night, with horror and anxiety.' Also he has to limit the allowance of bread to 2/25ths of a lb. per day, but luckily they catch by hand a booby. On 28th May they sight breakers ahead, and next day see the Great Barrier Reef, with a wide break in it. Through this they rush with wind and tide favouring: he thinks it is Captain Cook's Providential Channel and makes for islands near the coast of New Holland. There they remain six days, gathering oysters and clams, catching fish and birds, and taking long rests. They see only traces of the natives.—

"These advantages certainly preserved our lives."

Much refreshed, they set out on 3rd June northwards, with a favouring

¹ The Fijis are very numerous; but his course revealed only part of them, as Prof. G. C. Henderson shows (*Discoverers of the Fijis*, pp. 140-44).

east-south-east wind, but two men had always to bale. The passage of nine days to Endeavour Strait and through it and thence to Timor again exhausted them. The catching of two boobies and a dolphin probably saved their lives; but on 12th June, when they reached Timor, they were 'all skin and bones,' and some could scarcely walk. Dutch hospitality brought back life and health. During their forty-one days' voyage, of over 3,618 miles by the log, they had long subsisted on the food flung in by the mutineers, which was enough for only five days.

This brief summary of the most wonderful voyage performed by white men in a small open boat, with very little food and drink, enables us to realise some of their hardships and perils. The following points are noteworthy:—The chief dangers in a following gale were of being overwhelmed astern by billows with curling crests; also of the boat broaching to in the ensuing downward rush; but her reefed lug-foresail helped to keep her moving fast and straight ahead, else she must soon have foundered. The need of a sail had of course been felt by Indonesians and their emigrants who peopled the Pacific Islands. But, as Bligh's half-famished crew managed to out-distance the pursuing canoes, it seems that his two lugsails were far more effective than the usual single lateen sail of the Pacific craft. however, in these cases the natives came after them merely from curiosity. Obviously, after the Tofua episode, Bligh could take no chances with any natives, for in the Pacific only the strong were respected.

Another of his difficulties was dependence on rain for water supply; for he could put in only at uninhabited islets, which were generally waterless. Native crews, however, have been known to jump overboard after heavy rain and lap up the fresh water on the surface of the sea. By this or other devices the Polynesian can withstand drought longer than civilised man. Finally, the light draught of Bligh's boat saved him from coral reef, which would have destroyed a sailing ship. In unknown waters, fanged with such reefs, a boat or canoe has a far better chance of survival than a ship. Thus, incidents in Bligh's voyage explain how native

paddlers could make their way over vast spaces and near

dangerous reefs.

We turn now to the narratives of early European voyagers in the Pacific for their descriptions of native canoes and methods of navigation. So conservative are sailors, especially those of primitive races, that probably we here come near to the actualities of far off ages. At any rate, this information is our chief, almost our only, source; for the Pacific canoes of to-day have altered under the influence of white men's ideas and tools1; whereas through the eyes of the first white men we can descry (though dimly enough) Stone Age man fighting the sea. Here and there in the course of our inquiry we shall find facts which may throw light on the chief question at issue—why the natives of New Holland (as seen by Dampier and Cook) only poled about in shallows, while other peoples, in a more stimulating environment, launched into the open and by degrees spread over all the Pacific islands—the most marvellous of all maritime achievements.

It may be well to begin with the most primitive and backward peoples bordering that ocean. These, undoubtedly, were the aborigines of Australia and Tasmania. Ethnologists trace them back to Indonesia and believe them to have migrated thence across the then shallow or perhaps partly fordable Arafura and Timor Seas into Australia. The first and probably the most primitive migrants, pressing on to the south, found no Bass Strait, and so easily occupied what became later the island of Tasmania.² These people (now extinct) represented the very primitive life of the early Stone Age, but the somewhat later migrants who followed them from New Guinea were scarcely less primitive.

Accordingly, the impressions gained by the early explorers of New Holland and Van Diemen's Land

¹ Thus, double cances soon vanished from the South Island of New Zealand after the introduction of European boats (E. Best, *The Maori Cance*, p. 35).

A. C. Haddon, The Races of Man (Cambridge, 1929), p. 122.

(to give them their former names) are of high value. Unfortunately, most of them were so disgusted with the dirty, degraded and treacherous natives as to pass them by with a few contemptuous words. Their attitude was like that of Pigafetta in Magellan's company who wrote of the native Brazilians: "Their customs are rather bestial than otherwise." The early Dutch explorers of the north were on the lookout either for trade openings or for the fancied wealth of Terra Australis incognita. So their disgust at the naked aborigines was natural enough. In 1606, as we have seen, Janszoon skirted the north-east coast of the Gulf of Carpentaria, but soon sheered off from that forbidding land, because it was "inhabited in some places by wild, cruel black savages who killed some of the crew." Ten years later Dirck Hartog in the Eendracht sighted part of the equally forbidding western coasts which still bears his name. In the offing he found "various islands, which were, however, uninhabited"; and later explorers declared that the natives had no vessels in which to cross over to them. Thus, in 1688, Dampier declared them "the miserablest people in the world, . . . which differ little from brutes." He mentions no canoes or rafts, and it seems that along a great part of that inhospitable continent there was no seafaring. Indeed, he saw a "drove" of the natives swimming from one island to another. is also significant that Captain Flinders, while circumnavigating Australia in 1802, found that the large Kangaroo Island, though only seven miles off the promontory that borders the Gulf of St. Vincent, contained no natives, and swarmed with tame kangaroos. Here, then, are proofs that a very backward primitive race, which found enough subsistance along a continental coast, made no effort to get across a narrow strait to a large and promising island. In face of these and other facts, primitive man cannot be said to be naturally a seafaring creature. He needs to be tempted or driven on to that element.

The evidence in regard to navigation by the aborigines of Tasmania varies. In 1642 Tasman during his brief stay saw no signs of it in the fine sheltered bays inside "Tasman Peninsula." In 1777, Cook, during his third voyage, "saw no vessel in which they could go on the water," though much of their food came from the sea and fish abounded. But in 1801-2 the French semi-scientific expedition commanded by Captain Baudin found on that south and south-east coast eucalyptus bark-bundles lashed together at the ends with long grass or withies. One was 15 feet by 31 feet and was propelled some distance out by six men with poles.¹ Clearly, then, the supplies of fish (perhaps also shortage of food on land) tempted the Tasmanians to venture a little distance from the shore; but poling or paddling near the shore is not oceanic navigation, though with bolder races it may lead on to that difficult feat.

Still less were the natives of Botany Bay navigators. Of high interest is the account of them given in 1770 by Cook during his first voyage. He found them a stunted race of hunters of game, who made timid efforts to get from the sea something more than shellfish. His account is as follows:—

"We saw several natives walking briskly along the shore, four of whom carried a small canoe upon their shoulders. . . . The canoes, upon a near view, seemed very much to resemble those of the smaller sort at New Zealand. . . . Under the south head we saw four small canoes, with each one man on board, who were very busily engaged in striking fish with a long pike or spear. They ventured almost into the surf, and were so intent upon what they were doing, that, although the ship passed within a quarter of a mile of them, they scarcely turned their eyes towards her."

Later, Cook and his men examined similar canoes ¹ Péron, Voyage . . . aux Iles australes; also Mariner's Mirror, XVII, No. 1 for plates of these "balsas," a small one of which I am permitted to reproduce here. The author, Mr. H. H. Brindley, F.S.A., notes that such canoes were probably used on the Euphrates as early as 3500 B.C. He traces their growth in various parts. In Vol. XVII is also an article on primitive raft-canoes, by Dr. J. Hornell, who, with Dr. A. C. Haddon, will publish a great work on Pacific canoes. See also Vol. XIX for "Primitive Craft of Central African Lakes," by E. B. Worthington.



FASMANIAN RUSH (ANOES



Double Canoes of the Friendly Islands (Cook's Voyage)

that lay on the beach and found them "the worst we had ever seen; they were between 12 and 14 feet long, and made of the bark of a tree in one piece, which was drawn together and tied up at each end, the middle being kept open by sticks, which were placed across them from gunwale to gunwale as thwarts." Equally small and primitive were the native craft which Cook and his men found near the Endeavour River in North Queensland, while repairing their nearly shipwrecked ship. In the Cape York Peninsula the canoes were of the same length, but had been hollowed from the trunk of a tree and were balanced by outriggers—doubtless a sign of Papuan influence.

Another interesting case of stagnation, or even degradation, appears in the accounts of the Fuegians in the Straits of Magellan. In 1578, Drake found their canoes of "a most dainty mould . . . and excellent workmanship"; they were made of the bark of diverse trees sown together with thongs of sealskin, yet were almost watertight. The Fuegians' chief tool was a kind of knife made out of a large mussel shell; and the construction of such canoes out of the stunted trees of Tierra del Fuego implies considerable skill. Two centuries later, however, Cook described their bark canoes as of very poor workmanship. "In each (he writes) was a fire over which the poor creatures huddled. They likewise carry in their canoes large seal-hides to shelter them when at sea . . . and occasionally to be used for sails." He pronounced the Fuegians "a little, ugly, half-starved, beardless race." Equally sombre was the account of them given by Charles Darwin during the return voyage of H.M.S. Beagle early in 1834:—"I never saw more miserable creatures," they were stunted in their growth and filthy in their habits; he does not describe their canoes.1 So there, seemingly, the local conditions had sterilised man's inventive faculties and left him stunted.

¹ A Diary of the Voyage of H.M.S. Beagle, ed. N. Barlow (Cambridge, 1933), p. 212.

On the coast of Peru, Drake noted that the Indians paddled out to the Golden Hind in "bawses" (i.e. probably "balsas"), made of inflated seal skins, two of which when joined together side by side, formed a boat, that could be worked along quickly. These men, again, were continental coast fishermen, content with the easiest means of plying their craft. In New Albion also the native canoes were of poor construction. But further north at Nootka Sound (in Vancouver Island) Cook in 1778 found the natives using large chisels and knives of iron (procured from Spanish traders), wherewith they hollowed out trunks of trees for canoes 40 feet long, 7 feet broad, and 3 feet deep, slightly decorated, and carrying some two dozen persons (see Chapter X). They traded briskly in furs, etc., along the coast, and the possibilities of opening up a trade in furs with China induced some of Cook's men to return for that purpose a topic that will be treated later.

The cases just considered seem to show that tribes which inhabited a continental coast line, where there was enough food, made little or no progress in navigation; and the contrast with islanders having limited resources in food suggests that these were the first and most enterprising seafarers. Certainly the Australian aborigines were very far behind the Maoris of New Zealand, who, though still in the Stone Age, had become fine ocean seamen able to traverse long stretches of ocean in their great canoes. In 1642 Tasman found some of the Maori canoes to be double "prows" fastened by planks, propelled by long pointed paddles at a great rate. Others were ordinary canoes, with high pointed bows, holding seventeen warriors, who gave his two ships a murderous reception. On 1st November, 1769, Cook recorded the approach of a double canoe from Whale Island, and off South Island saw several such craft. In 1770 he measured one of their great single war canoes and found it 68 feet long, 5 feet broad, and 3 feet deep; the keel consisted of three parts, fastened together with

strong plaiting (incidentally, this allows a certain amount of "play" in riding over the waves); but "each side consisted of one entire plank, 63 feet long, 10 or 12 inches broad," and skilfully lashed to the bottom. A piece of ornamental wood 6 feet long projected over the bow, and another, more than double as high, rose above the stern. Captain Furneaux's account of a great war canoe is very similar. These and other details (for which see Mr. E. Best's monograph) reveal the amount of progress achieved by Stone Age man, enough to enable him to sail over vast spaces of the Pacific Ocean.

It is now generally admitted that the ancestors of the Maori were Polynesians, who, coming originally from Indonesia, voyaged to the westernmost islands of the Pacific, and thence spread to the Fijis and Central Polynesia. Legend says that they conquered the primitive inhabitants and absorbed them. (These may possibly have been Melanesians.) When the Maoris migrated across the great stretch of ocean to New Zealand is not clearly revealed by their traditions, but it may have been about 700 to 600 years ago, and due to over-population in their former homes. How women survived a voyage of about a thousand miles is a marvel.

Yet it must be remembered that early man had singular and now forgotten means of assuaging hunger and thirst on a long voyage; also that occasionally there are in the Central and South-West Pacific long spells of northerly winds. Crawford, in his Recollections of Travel, recalls encountering a head wind all the way from Auckland to Honolulu in the autumn, and such a spell would greatly help in the passage from the Central Polynesian islands to New Zealand. Also the Indonesians and Polynesians early developed great constructional and navigational skill, which indeed was a necessity for existence to inhabitants of comparatively small islands, certain soon to become overcrowded. Further, the recorded long voyages even of average Pacific canoes

¹ This last must have been a substantial dugout.

within comparatively recent times show that lengthy migrations were possibly for hardy men and women. A tradition of such a migration from one of the Cook group to a distant island, where the women outnumbered the men, is quoted in *The Polynesian Review* for June, 1934.

As to the chief types of canoes in the Pacific, they were:—(1) the single canoe without outrigger, (2) the double canoe, (3) the single canoe with outrigger. We will consider them briefly in order:—

(1) This is the simplest form of canoe, usually a dugout, and it was and is common, especially in New Zealand, though occasionally Cook saw an outrigger on a small canoe. Nowhere else has the single canoe been developed to such length as by the Maori for war. In 1769 Sir Joseph Banks, in the Endeavour, describes them as very narrow for their length which nearly equalled that of the ship. They carried about 100 men, and yet could be paddled at high speed, even in rough seas.—"Over tempestuous seas (wrote Dr. Thompson about 1840) war-canoes ride like sea-fowl. Should a wave throw a canoe on its side, the paddlers to windward lean over the gunwale, thrust their paddles deep into the wave, and by a curious action, force the water under the canoe. This makes the vessel regain her equilibrium." Despite their great length these dugout war canoes could stand the strain of stretching from crest to crest of billows. In such canoes sails were never used, and rarely in their ordinary single canoes. The statements of some early observers that these long canoes were built of planks has been shown to be incorrect. The planks were added on above so as to raise the sides of dugout hulls.² Very remarkable is the skill of the Maori in the wood carving which ornamented the sides and the bow and stern decorations of their war canoes. As their chief aim always was to terrify strangers and enemies, their favourite bow

ornament was a huge head with glaring eyes and con-

temptuously lolling tongue.

The single canoe without outrigger was also the rule in the Solomon group. There the use of the sail is a comparatively modern innovation. In 1568, as we have seen, Mendaña, on arriving at the Solomons, was met by narrow but long crescent-shaped canoes, which could be paddled at a speed sufficient to overtake a ship when sailing fast. So there also the islanders had developed a light craft of remarkable speed, yet seaworthy. For trading purposes they used a much broader and deeper type of single but sail-less canoe. (Sails found there are recent innovations.) In 1568, Mendaña saw in a hut of the Solomons three canoes, 24 paces long, 7 feet wide, and he reports one as 16 feet wide (surely a slip for 6 feet?). "Store rooms were made in them, from which it was inferred that they were used for trading with other islands, the wares for barter being stored therein."1 Thus, these islanders had invented both a very fast, and a solid trading type of single canoe, having a store-room amidships.

(2) The double canoe is of two main types: (a) two hulls of approximately equal size, having the mast somewhat forward, so that there is a definite bow and stern; or (b) two hulls of unequal size with the mast amidships in the larger hull, but double-ended and able to sail either end forward. (a) is found in New Caledonia, and in the Cook, Samoa, Society, Tuamotu, Marquesas and Hawaiian groups, also in New Zealand. (b) is thought to have been developed out of the former, in order to get a double-ended craft; and the smaller canoe in some cases became only a large float. It originated probably in Fiji, and displaced the former type in some of the adjacent groups in the latter half of the eighteenth century.²

¹ Lord Amherst, Discovery of the Solomon Islands (Hakluyt Soc.), II, 347. ² From information supplied by Dr. A. C. Haddon, on the authority of Dr. J. Hornell. Cook thought the double canoes of New Caledonia very clumsy (Second Voyage, Bk. III, Ch. 9).

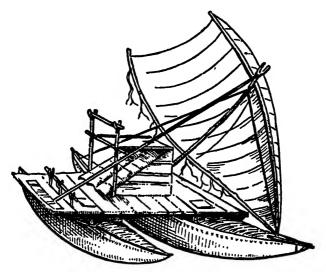
The records of explorers (alas, generally very brief) show that the double canoe was wide spread. Thus, in 1642 Tasman saw it, as well as the single canoe, off the South Island of New Zealand. In 1769-70, Cook found double canoes far commoner there than in North Island, where the very big trees provided timber large enough to ensure stability in single canoes. The South Island double canoes carried sails often made of mats—a clumsy form of sail general on the coast of China. As to seaworthiness, E. Best writes: "In storms they (the Maori) would often lash two or three together into rafts, and ride out the storm by keeping the bows to the wind. Sometimes, in bad storms, the lashings would break, and then there was trouble and perhaps loss of life." Ellis, as we shall see, reported loss of life from the double canoes of the Society Islands being sometimes wrenched asunder in a storm. this evidently was the chief weakness of that type. Nevertheless, it was generally used for long voyages and trading. The booms between the canoes afforded good flooring for some kind of shelter or store room, and obviously this was the most convenient type for trading or migration. Books of Pacific exploration report many examples of such canoes thus employed. They generally carried one mast with a big lateen sail, or sometimes two masts, each with a lateen sail; in either case the fore peak was fastened down near the bow.2

(b) The second type carried one slanting mast on the larger canoe. This was the type common in Fiji; the mast, slanting outwards, was held by ropes both to the larger and the smaller canoe; it supported a triangular (Pacific) lateen sail, whose peak was fastened down near the bow. Between the two canoes was a large

¹ E. Best, p. 13 (from information by an old Maori).

² See on page 142 the print reproduced from Tasman's voyage when off Rotterdam Island (Friendly Group). A, are the Dutch ships: B, small native proas waiting on them: C, a big double proa: D, a fishing proa, with outrigger: E, natives swimming with fruit: F, the king's huts.

solid platform supporting a kind of shelter or store-room. The smaller canoe must always be to windward. A later observer reports that putting about is troublesome; also that steering by a heavy oar at the stern is difficult; for a heavy sea may jerk the oar violently and injure the



FIJIAN DOUBLE CANOE

steerer. This kind cannot tack and may be upset if a great wave lifts the lesser canoe out of water or submerges it in the trough. In short, it is judged to-day to be unsuitable for stormy weather.¹

Type (a) was preferred for war, though never in New Zealand. In 1774, Cook found at Tahiti a fleet "of 160 large double canoes, very well equipped, manned and armed. The chiefs, and all those on the fighting stages were dressed in their war habits... Besides the vessels of war, there were 170 sail of smaller double canoes, all with a little house upon them, and rigged with a mast and sail, which the war canoes had not. These

¹ R. Abercromby, Seas and Skies (1888), p. 101.

were designed for transport and victuallers; for in the war canoes was no sort of provisions whatever." The whole fleet, carrying 7760 men, was about to subdue a rebellious island. Unfortunately, Cook gives no details as to the fighting stages on the double war canoes; but their stability must have been assured so that in ordinary weather warriors could use effectively their weapons, "clubs, spears and stones"; and he states that the decisive fights always took place at sea, not on land—a sign that these Polynesians were true children of the sea. Yet Captain Vancouver, who touched at Tahiti in 1792, could not find one double war canoe, and he stated that sea battles had been replaced by battles on land. So quick were some changes caused by the advent of the white man.

It is of interest to contrast the account of Captain (later Admiral) John Moresby of the war canoes of East New Guinea. In May, 1874, after exploring and charting 2000 miles of its coast (then the longest stretch of unexplored coast in the world), he found, to the west of Cape Nelson, natives who had canoes of a novel type. They were so narrow that a man could barely squeeze into them, but they were balanced by "the usual outrigger, and they had balancing spars on the opposite side, supporting a fighting stage, on which five or six men could stand."

(3) More important still is the question of the outrigger for steadying the canoe to which it is attached. Sometimes it was double, i.e. on both sides. In 1699, Dampier observed canoes of this type in North-West New Guinea, and in the island and "mainland" west of it. But on the whole the Pacific islanders preferred a single outrigger; and the fastest sailing canoes were always of the latter type, which is considered by an authority on Pacific craft to be "in a nautical sense an advance."²

¹ J. Moresby, Two Admirals, p. 294.

² G. Friederici, in Petermann's Geograph. Mitteilungen, Heft 5/6, p. 130.

As the single outrigger proved to be equally effective, it certainly was an advance, for it saved weight and thereby conduced to higher speed.

The single canoe with one outrigger is probably the most efficient of native Pacific craft. Started probably in south-east Asia or Indonesia, it spread over nearly all the Pacific (with exceptions noted above); for it was, in general, lighter and faster than the double canoe and safer than the single canoe without outrigger. Indeed, a very narrow dugout, if provided with an outrigger, can be quite safe under ordinary conditions.¹

The finest example of small fast outrigger canoes is afforded by those of the Ladrones or Marianne Islands. Magellan and his men marvelled at the speed of these "flying proas"; and his comrade Pigafetta, described those thievish islanders as "delighting to plough the sea with their small boats. . . . They change stern and bow at will, . . . and resemble the dolphins, which leap in the water from wave to wave."2 Certainly they were very well adapted to local conditions, for those islands lie almost in a line north to south, and the wind there blows steadily from the east. The islanders therefore evolved a type of double-ended canoe which always sailed with the outrigger (i.e. a dwarfed canoe or float) to windward. It had noteworthy differences from other Pacific craft, especially a bulge on the windward side of the canoe, whereas the lee side was perpendicular. Amidships was a mast with a yard which (says Dampier) "peaks up and down like a mizzen-yard," and it carried a large lateen-like sail, that could be reefed in a high He reckoned their top speed at 24 miles an hour, and though they heeled over they never capsized. 1743, their speed and seaworthiness aroused the admiration of Peircy Brett, chief lieutenant in Anson's Centurion,

¹ See the very narrow ones of the Gilbert and Reef Groups in Best, pp. 15, 21.

³ Pigafetta, First Voyage Round the World (ed. J. A. Robertson), I, 95. For a plan of them see above, p. 148.

who took one of them to pieces so as to re-fashion a similar one at Portsmouth. Of course these craft were suited only to a north to south group of islands where the wind was always east. There, however, these remote Micronesians, though ignorant both of the use of metals and the principles of stability, had evolved a type of sailing canoe which exactly met their needs. In truth, they had solved that problem of sailing safely and quickly with a strong wind full abeam, which had baffled Phoenician, Greek and Roman seamen, and hindered oceanic expansion in the ancient world.

As to defects in the Central Pacific canoes, I may quote from the experience and records of the Rev. William Ellis, a missionary who, about a century ago, commented on the Society Island canoes. Their large double canoes were very imposing, but he deemed them weaker than the single canoes of the Maori, for in a severe storm the double canoes were liable to be torn apart and founder. Therefore, single canoes were then deemed safer for long voyages. For local needs or fishing inshore small, narrow and roughly built single canoes sufficed. They had clumsy outriggers, which, however, enabled them to carry a curious high curved sail. upset, the crew of two or three men cleverly tilted the canoe from the ends to get rid of the water and then Meanwhile the danger from sharks was terrible. These sometimes attacked low canoes and seized part or even the whole of the crew.1

Enough examples have been cited to illustrate the wide spread of different types of canoes over the Pacific. As a sign of the keen observation of Cook, we may note that, in January, 1778, during his third voyage, he was agreeably surprised to find from his Tahitian interpreters that the Hawaiians spoke the same language as the inhabitants of Tahiti and of other islands lately visited, and, as will appear in Chapter X, he reflected on the

¹ W. Ellis, Polynesian Researches, I, 176-180.

marvellously wide spread of the Polynesian and cognate races all over the Pacific. Equally suggestive was his comment in 1778, when in Nootka Sound (Vancouver Island), that the absence of sails and outriggers from the canoes there "distinguishes them from the Pacific islanders and the south of the East Indies." These differences, added to that of language showed him at once that he was in a different world. He also expressed the hope that Europeans would not seek to colonise or annex the Pacific Islands, as they would probably spoil them. In some respects he was correct, for during the next generations, white adventurers and traders corrupted these virile islanders. But latterly, white men in general have tried to set right those wrongs, and Cook's sombre forecast may finally be reversed. It has been in New Zealand.

In recent years traces have been found of a remarkable commercial and social system which prevails among the islanders to the south-east of New Guinea. By it, commerce and all intercourse are regulated according to a code of rules, which are strictly observed. The system is termed "Kula." An ample description of it is given by the scientific investigator, Dr. Malinowski, in his Argonauts of the Western Pacific. It affords a remarkable proof of the power of the Papuo-Melanesians to organise safeguards for commerce and intercourse over a relatively large area. Nothing like it was evolved in early Europe.

The contrast between all these enterprising islanders and the stupidly inert fish-spearers of Botany Bay yields food for thought. While the latter (coast-dwellers on a great Continent) were intent only on getting food easily and safely from sea or land, the typical Pacific character had been formed by agelong struggles ashore and afloat. For they lived in clusters of tropical islets, no one of which was entirely self-sufficing or provided room for expansion. But Nature, which compelled them to have frequent intercourse,

provided timber and fibre for the building of canoes, while a generally calm sea, and winds that in some zones were constant, favoured the run from islet to islet and constant fishing. These activities kept them alert and manly, in fact utterly different from the inert inland tribes of tropical lands. Further, the Polynesians positively loved the sea and sailing, and in this respect were far happier afloat than the early Mediterranean folk, who had generally to toil with oars.

Yet in many respects their conditions resembled those which on a small scale made the Greeks a seafaring race, alert, resourceful and receptive of new inventions. The Hellenes developed superior brain-power; but then they enjoyed the advantage of the proximity of continents inhabited by peoples of far different cultures which brought a stimulating clash of customs and ideas; whereas the Polynesians, lacking such a stimulus, remained insular and made no marked progress in the arts and sciences. Also their failure to evolve an alphabet told against the trustworthy transmission of ideas or records of events—a lack, the importance of which can be realised only by thinking out all that the Graeco-Levantine script has meant to them and to the western world.

A kind of script was invented in Easter Island and one or two others; but it seems not to have spread. I regret that limits of space preclude any account here of the wonders of that Mystery Island. (See the works of the late Dr. Macmillan Brown; also above p. 155.)

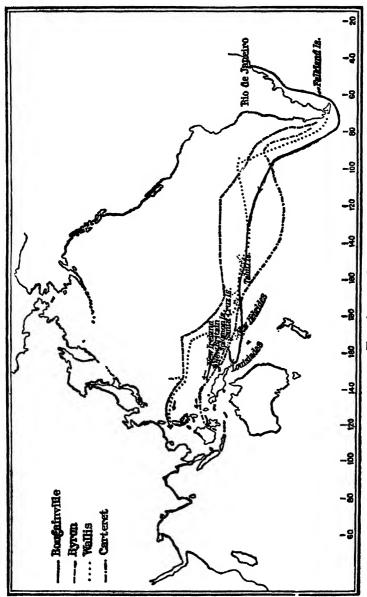
CHAPTER X

BOUGAINVILLE, COOK AND THE PROBLEMS OF THE PACIFIC

"Mr. Cook has done so much that he has left me nothing to do but admire his work."—(La Pérouse.)

THE eighteenth century witnessed no really important oceanic discoveries until the time of Bougainville and Cook, for Anson's circumnavigation in 1740-2 was more an act of war against Spain than of exploration.1 Yet in this dull time at sea, trade was expanding apace, ships were growing both in size and in seaworthiness, e.g. the lowering of the poop and the general introduction of the jib (the fore-topmast staysail) helped to keep the ship's head well before the wind in a following gale. No more, then, do we hear of the device, recorded by Dampier, of seamen standing on the bow and holding out their coats wide to help to keep the ship before the wind. Also in 1714 the foundation by our Government of the Board of Longitude, and the resulting inventions of the sextant and chronometer, enabled "masters" to keep time with something like accuracy, and therefore to calculate longitude far more exactly than was possible in the age of Tasman. Consequently, the time was now ripe for clearing up many problems in the remote and hitherto unexplored parts of the oceans, and the gradual increase in the size and comfort of ships, together with improvements in hygiene and food supply, kept crews efficient even to the end of long voyages.

¹ Shelvocke's voyage round the world (1719-22) was a semi-piratical raid. In 1726, when Swift published *Gulliver's Travels*, he could confidently place Lilliput as a wonderland about where the south of South Australia is.



THE AGE OF COOK

time of Sir James Lancaster, East Indiamen were supplied with lime-juice, and were called "lime-juicers." In general, the Royal Navy neglected this cure for scurvy until about 1790.

After the Peace of Utrecht (1713) maritime commerce advanced rapidly, especially that of the Slave Trade from Africa to the Americas. France also made great efforts to extend her colonies in Africa and North America so that even by the year 1736 her growth aroused general concern. Already, in 1721-22, the Great South Land had been sought by a Dutch seaman, Roggeveen, to the west of South America, where Dampier's chief, Davis, had reported signs of high land. Roggeveen now discovered the mysterious Easter Island, with its vast raised platforms of colossal stone statues, which (says Dr. Macmillan Brown) imply efforts exceeding those needed for the erection of Westminster Abbey. still defy explanation. But the islanders (who were defenceless) placed their trust wholly, when attacked by the Dutch crew, in these colossal statues. Roggeveen re-discovered some Polynesian islands (probably in the Palliser and Society Groups), touched at New Britain and then completed his circumnavigation of the globe—the last great feat of Dutch seamen.2

This and other efforts spurred on a French seaman, Pierre Bouvet, in 1739, to find the Southern Continent. Far to the south-south-west of South Africa, in latitude 55° south, he sighted a lofty headland which he assumed to be its northern point. It was a worthless island, now named after him. In 1771 a French navigator, Kerguelen, renewed the search in the south of the Indian Ocean, for a fertile southern land reported vaguely by de Gonneville of Honfleur early in the sixteenth century. He sighted land which, like Bouvet, he hopefully reported as part of the Continent, which

¹ Anderson, Origin of Commerce, III, 216.

² As Mr. Heawood shows (*Geograph*. Discovery, p. 211) Roggeveen erred by harshness towards the natives.

would command the sea route to the East Indies. It was the almost uninhabitable Kerguelen Island.

These last efforts, in which mere surmise played far too large a part, scarcely deserve notice here except as explaining why, after her defeat in the Seven Years' War (1756-63), France sought to retrieve her position overseas by a renewal of the age-long quest for the Terra Australis incognita, which imaginative geographers still endowed with vast resources. Already, in 1756, a French writer, de Brosses, had pointed out that nothing was known of the Southern Pacific, yet in that vast expanse there might exist, as Ptolemy had pointed out about A.D. 150, a great continent peopled by nations as mighty as those of Europe. Let, then, the French acquire those lands, and they would achieve world supremacy, for "he who is master of the sea is master of the land."

In 1766 there came a sharp retort from a Briton, John Callender, who published a book summoning his countrymen, now masters of the seas, to acquire these vast potential resources. Also, about the same time, Alexander Dalrymple, a Scottish merchant and seafarer, who had traded in the East Indies, compiled a survey of the discoveries in the Pacific Ocean up to 1764, which he printed in 1767 and published in 1769. In it he asserted that the Great South Land had been discovered on the east side by Juan Fernandez, on the west by Tasman, and elsewhere by others. It therefore only remained to find the intermediate parts; and the whole would comprise "a greater extent than the whole civilised part of Asia, from Turkey eastward to the extremity of China." Here was the final spur to explorations in the South Pacific.

In truth, during man's age-long spread over the oceans, nothing is more singular than his neglect of that vast area. Though fanciful cartographers had for ages filled it with *Terra Australis*, or sea monsters, yet it

¹ A. Dalrymple, Discoveries in the South Pacific (Small Ed.), pp. 89-102.

remained incognita down to the time of James Cook. Why this long delay? I suggest these three reasons:— (1) After threading the mazy Straits of Magellan, or doubling tempestuous Cape Horn, ships were generally so battered by the prevalent westerly gales, and crews were so weary and scorbutic, that further struggles westwards were unthinkable and sails were gladly set for a run northwards towards more genial climes. Thus, though Dampier had urged the need of stretching on westwards from Cape Horn towards New Holland in order to discover the Great South Land,1 yet explorers, one and all, stood away to the North, or at most to the North-West. (2) Not only west winds and scurvy, but also the northerly Humboldt current led them to shape their course for that buccaneers' paradise, the Isle of Juan Fernandez. About latitude 14° south the current turns north-west and then west across the Pacific Ocean, while another branch of it bears ships to the coast of Mexico, off which (about 14° north) the trade wind and current favour a quick run to the Marshall, Caroline or Ladrone Islands—a course gen-(3) The erally followed down to the time of Anson. precious metals of Peru and Mexico also tempted seamen northwards either to work them or to plunder the vessels that bore the bullion from Acapulco to the Philippines, and on to Spain. Thus Nature and man's greed limited him, during some 150 years, to certain well-marked Pacific routes, and relegated the south of that vast expanse to the domain of vain conjecture or political jealousy.

This was now to be changed, for both British and French expeditions were despatched to the Pacific. The first was that of the Hon. John Byron in H.M.S. Dolphin (1764-66), who had orders ultimately to find a strait through from the north of Drake's New Albion to Hudson's Bay, or else return via the Cape of Good Hope. He sailed nowhere near New Albion, but headed northnorth-west and then west from the Straits of Magellan

¹ Dampier, W., Voyage (ed. Masefield), I, 450.

to the Ladrones and sighted nothing except a few valueless islets. In 1766-68 Captain Samuel Wallis, in the Dolphin sought for the Southern Continent and discovered Tahiti, which he named and annexed as King George's Island, but he accomplished nothing else of importance. Sir Clements Markham declares him "half-hearted" about discoveries. His colleague, Carteret, in the little laggard Swallow, sighted Pitcairn's Island and a few others near by, and, sailing on westwards, re-discovered the Santa Cruz group; he also found that Dampier's New Britain consisted of two islands; the smaller he named New Ireland. Assailed by the islanders, he had hard work to reach Dutch settlements and was there churlishly treated. Finally, after numberless dangers he reached Spithead in March, 1769.

Compared with these three failures, high praise must attach to the effort of the chivalrous Louis de Bougainville. During the Seven Years' War he had struggled gallantly, under the leadership of Montcalm, to avert the doom of Canada, which they both foresaw; and now the junior joined the French Navy in order to restore the fortunes of France by means of the maritime discoveries suggested by de Brosses. If his nautical experience had been equal to his spirit, if also his programme had prescribed a more southerly course, he might have anticipated Cook. But in both respects he was less well prepared. The contrasts between their expeditions are full of interest.

Bougainville set sail in November, 1766, three months after Wallis, with a new frigate, Boudeuse (26), and a storeship, Etoile (20). (It was a mistake to send frigates so heavily gunned.) The Government sent with him two scientists—the first time that science was fitly represented in oceanic voyages. His orders were to proceed by the south of South America, then make for the tropics, and, within the tropics, proceed towards the East Indies. His preliminary attempt at settling part of the Falkland Isles (already considered an excellent

¹ Clowes, Royal Navy, IV, 121.



BOUGAINVILLE



base for Pacific discoveries) had meanwhile failed; for Spain asserted her overlordship of that group. After long delays he entered the Straits of Magellan and took fifty-two days to pass through them-a long passage, performed against strong head winds. The Pacific, however, was true to its name, and, after a fruitless search for the Southern Continent, the two ships made Tahiti, where Wallis had been eight months before. The Frenchmen admired greatly the Tahitian men and still more their women—"Whose appearance ravished the eye and the heart, and all their gestures were harmonious." Indeed, Bougainville, classical scholar as he was, now dedicated the island to Venus by naming it The New Cythera; also, disregarding the act of annexation to England, he declared it subject to France (she acquired it in 1843). The natives celebrated the new connection by offering presents, even including their wives and daughters, while they themselves stole everything of value with incredible skill.

Tearing themselves away from this abode of Venus and Mercury, Bougainville next re-discovered islands which, owing to the skill of the natives in handling their lateen-sail canoes, he called The Navigators' Archipelago; we term them Samoa. Then, taking a rather more southerly course than those taken by Schouten and Tasman, he re-discovered the islands which Quiros had dedicated to the Holy Spirit, and which Cook in his second voyage was to re-name the New Hebrides. Bougainville, who knew Quiros's description of the islands, believed them to be the lands discovered by that idealist Spaniard.

Thereafter, despite the shortness of his stock of provisions, the French voyager resolved to discover the east of New Holland by sailing due west along latitude 15°, not north-west as most voyagers had done; but after many days he met with a line of shoals and rocks, on which breakers beat with great violence. (It is still termed Bougainville Reef.) So he put about to the

north, thus avoiding the Great Barrier Reef which proved nearly fatal to Cook three years later. Turning north-east, Bougainville soon sighted a maze of islets off the southeastern tip of New Guinea. If only he had known for certain that Prado and Torres had sailed on westwards, i.e. on the south side of that great island, he might have re-discovered the long forgotten Torres Straits. But he deemed their existence at best highly uncertain. he wrote in his Journal—"We even thought we saw the land stretch west-south-west. We had to try to get out as quickly as possible from this gulf into which we had ventured." Accordingly, he stood away to the east to get away from the endless shoals and islets, the risks from which were doubled by currents and mists. Worst of all, his crews were weak and discontented from lack of food; for he had been unable to get supplies from Quiros's islands. Also his ships, especially the smaller, worked badly, so that he could not entrust her with inshore work or exploring ahead, as might otherwise have been helpful. Indeed, in the mists they could scarcely keep in touch. So Cook was better off with one strong sound capacious ship, which he was careful to provision at all possible places, than Bougainville with two that were ill-matched. True, the French crews never underwent the awful experiences of the Endeavour on an isolated coral reef; but after 10th June they encountered daily risks, often in thick weather, off the long line of islets and rocks south-east of New Guinea, which he named the Louisiade Archipelago. At last on the 20th, when almost in despair, they sighted its lofty eastern tip fronting open and deep water, and, on rounding it, he gave the name Cape Deliverance. Thus, he escaped from terrible dangers, but he had missed Torres Strait. Bearing northwards, he at length hove in sight of the outlying islands belonging to that Solomon group which had eluded the search of several explorers.

¹ Bougainville, *Voyage* (1766-69), Eng. Ed., p. 259. His chart also names it Golfe de la Louisiade.

The most northerly one is still called after him. Finding the natives hostile, he made for Dampier's much belauded New Britain, and one of the French sailors stumbled on a lead plate with English words on it, a relic of Carteret's

voyage.

Little else of interest was found in New Britain, and storms of rain weakened and discouraged the men. In fact Bougainville struck the island on the worse side, where snakes and scorpions abounded and food was lacking. So, sailing on to the west, he left New Britain unexplored. Coasting the north of New Guinea, the two ships passed through Le Passage des Français, and on 28th September, neared Batavia, where the Dutch tried to appease their gargantuan hunger. The officials, however, though piling on the food, kept all knowledge of the routes secret. Finally, with some difficulty owing to Java fever, Bougainville early in 1769 reached Cape Town, and, overtaking Carteret's Swallow, cast anchor in St. Malo on 16th March, 1769.

His circumnavigation, though highly creditable to a former soldier, had not achieved complete success, mainly owing to his inexperience at sea, the defects of his ships, and inability to secure or store sufficient provisions for the long crisis off New Guinea. He had re-discovered much but discovered comparatively little, and his charts were often left vague. "I think a passage may be there" occurs once or twice. (Cook would have sailed into it.) They were criticised by his greater, though tragically unfortunate, successor, La Pérouse. Nevertheless, his homecoming encouraged the French to improve their navy and go on with explorations, in which the next King, Louis XVI, took great interest, for the great hobby of that crowned misfit was geography.

Bougainville's chief influence lay in the political sphere; for his notes on the Dutch stations in the Far East revealed their weakness. "To desire (he wrote) the destruction of this exclusive [Dutch] trade would be to effect it. The best safeguard of the Dutch consists

in the ignorance of the rest of Europe concerning the state of these isles (i.e. the Spice Islands)."

Thus he quickened the desire of the French to control or conquer Holland, so as to absorb the wealth of the Far East—a fact which explains much in the actions of the French towards the Dutch Republic under Louis XVI and Napoleon. To control or annex that State would also dower France with a vast colonial empire, including world points like the Cape, Ceylon, Java and Guiana, all of which, as we shall see, were at stake in the Napoleonic War.²

Meanwhile, with admirable tenacity, in spite of the failures of 1764-68, the British Admiralty was prosecuting its plan of clearing up the problem of the Great South Land. Indeed, those failures may have suggested to some of its officials the need of taking a more southerly course in the Pacific. Also an opportunity for a new effort was afforded by the Royal Society requesting its aid for observing the transit of Venus at Tahiti in June, 1769. This occasion was long believed to be the sole cause of the third British expedition to the Pacific, that of James Cook. But in recent years his additional secret Instructions were found by the Admiralty Librarian, the late Mr. W. G. Perrin. They show that this astronomical event was merely the pretext for a far-reaching effort at discovering Terra Australis incognita. In fact if the Royal Society had had its way, the commander of the expedition would have been Alexander Dalrymple, who (as we have seen) had of late been compiling a book, Discoveries in the South Pacific. He had strong claims, but stretched them too far by requiring to be placed in supreme command, a step incompatible with Admiralty rules. Fortunately, in this case the requirements of officialism and efficiency coincided; for the choice of My Lords fell on the ablest and besttrained of all coastal explorers.

¹ Bougainville, Voyage (1766-69), Eng. Ed., p. 367.

² Rose, J. H., Life of Napoleon, Chap. 15.



CAPTAIN JAMES COOK

James Cook had long been inured to hardships both on land and sea. The son of an agricultural labourer of Marton in North Yorkshire, he from childhood knew how to fend for himself. Afterwards, both as common seaman and mate, he learnt seafaring in the Whithy coasting trade, and finally in the Royal Navy. His fine physique (he was over 6 feet), quiet but resolute behaviour and keen vision soon brought promotion during the Seven Years' War; and as "master" he rendered yeoman service in surveying with minute care the almost unknown channel of the St. Lawrence for Wolfe's famous expedition. Thereafter he was long employed in dangerous surveying work on the coasts of Newfoundland and Labrador, which he charted with his usual thoroughness, eagerly studying mathematics in his spare time in winter at Halifax so as to master the science of navigation. Thus, although he had risen from the ranks, the Admiralty (greatly to its credit) now gave him, in his fortieth year, a commission as lieutenant to command the expedition destined for the discovery of the Great Southern Continent. Dalrymple deeply resented this appointment, but generously helped the botanist of the expedition, (Sir) Joseph Banks, with information and gave him a copy of his new book, though it was not published until after Bougainville's return home in March, 1769.

Fortunately, the Admiralty allowed Cook to choose his own ship. He chose a stoutly built capacious Whitby collier, of 366 tons, which, when bought into the Royal Navy, was styled H.M. Barque *Endeavour*. She was the best and most seaworthy craft ever sent on such a quest; and the crew were as good as the ship.¹ No smaller consort was sent for inshore work. On the other hand, the secret Instructions of 30th July, 1768, drawn up for Cook by the Admiralty, far excelled all previous

¹ See the model facing p. 194, reproduced, by permission, from the *Mariner's Mirror*, Vol. XIX. She was "cat-built" (Norwegian "kati") with bluff bows and wide waist. Her draught was 13 feet 6 inches. She carried provisions for 18 months: and her complement was 94 persons in all. (Cook's Journal, ed. W. J. L. Wharton, p. xxviii.—I now quote from this edition of the Journal.

programmes for Pacific exploration. They show that the chief aims of the expedition were not only geographical but political. After the astronomical duties at Tahiti were finished, Cook was to sail southward as far as latitude 40° for the purpose of discovering the great Continent which was believed to exist thereabouts. Or, if he sighted no land, he might sail westward between latitudes 35° and 40° until he found either the Continent itself or else New Zealand. He was to explore as much as possible of the new Continent, observe the ways of the natives, trade with them, gain their friendship, and, "with their consent," annex suitable parts to Great Britain. The same instructions would apply to New Zealand; and thereafter he was free to sail to "some known port, where you may procure a sufficiency (of provisions) to carry you to England, either round the Cape of Good Hope or Cape Horn, as from circumstances you may judge the most eligible way of returning home."1

These Instructions were signed by the Lords of the Admiralty, Admirals Hawke and Peircy Brett, and Lord Charles Spencer. Probably Brett, who had sailed round the world with Anson in H.M.S. Centurion, was the chief inspirer of them, and, if so, his was the plan which led to the re-discovery of New Zealand and the discovery of Australia on the east side. Certainly Cook did not inspire them; for he knew only northern waters. expedition was to be helped also by two astronomers, an artist, the botanists, (Sir) Joseph Banks and a Swede, Dr. Solander. Thanks to Cook's forethought in laying in good store of food, including anti-scorbutics like lemons, oranges, raisins and "sourkrout," scurvy was kept at bay. On Tierra del Fuego they gathered wild celery and mixed it with soup: so (wrote the ship's surgeon, Perry), "We passed Cape Horn, all our men as free from scurvy as on leaving Plymouth." Thus, at

¹ In Admy. P.R.O. 2/1332: published in N.R.S. Naval Miscellany, III, pp. 341-50 (1928). Wharton did not know of them, but inferred them indirectly, though correctly, p. xxviii.

COOK'S "ENDEAVOLR"

last, after 3000 years of seafaring and generally illprepared exploring, an expedition had set forth under
the most favourable auspices; for it was headed by an
able and thoroughly trained seamen and hydrographer,
with a first-class ship and crew, and it proceeded on a
well thought out quest. No contrast is more marked
than that offered by Anson's Voyage round the World
(1740-44). His sixty-gun ship, Centurion, was overgunned and overcrowded with weak old men. She
nearly foundered in the winter gales off Cape Horn, and
afterwards his 500 men were "reduced to 213," many
of these weak with scurvy; and by the time they reached
Juan Fernandez only ten men in a watch were fit for
duty.1

On the other hand, Cook experienced favourable weather round Cape Horn, and proved that in average conditions in summer, the open sea route was better than the mazy straits. His quick passage almost direct towards Tahiti disconcerted the Spaniards, whose recent fortification of the only good bay in Juan Fernandez, was intended to exclude "interlopers" from the Pacific. Cook, like Drake, helped to throw that ocean open to the world. After a quick run of only 260 days from Plymouth, he anchored at Tahiti on 11th April, 1769.

There he had abundance of time to satisfy his curiosity about the natives, whom he ordered to be treated humanely, even when they stole every possible object. He and the scientists studied carefully both them and their island, so that this sojourn of 93 days yielded more definite results for astronomy, ethnology, botany, and geology, than any voyage yet recorded. On 3rd June the transit of Venus was observed; but that goddess was in the ascendant at Tahiti; and the crew were so much weakened by their debaucheries in the island that Cook decided not to sail due south but to make first for islands only two days' sail to the west of Tahiti. This and other news Cook had from Tupia, a priest, who, being accused

¹ Anson's Voyage, Dr. Masefield's Introduction; also Bk. I, Chap. 8.

of murder, found it desirable to leave the island and therefore joined Cook. Tupia knew the positions of seventy-four islands, and was useful to the expedition in many ways.¹

Proceeding westwards from Tahiti on 13th July, Cook soon discovered four beautiful islands, which he named the Society Islands, after the Royal Society. He charted the whole group, in many parts fringed with coral reefs, and bartered with the natives for hogs and fruit. A month having been spent there in exploring and in restoring the strength of his crew, the Endeavour stood away southwards for other small islands with which Tupia was well acquainted, though he had never heard of any great land to the south—a fact which increased Cook's disbelief in a Southern Continent. Herein he differed from de Brosses and Dalrymple, though he frequently consulted their books.

Nevertheless, as in duty bound, he explored the sea even to the far south. Grimly he held on for many days, though the crew shivered and the Society Islands' hogs died apace. On 2nd September, when about latitude 40°, as there was no sign of land, and cold storms beset them, he resolved to put about northwards lest the ship be too much battered. But he had gone more than 1200 miles southwards in search of what he believed to be a chimera. His scepticism was natural enough, for de Brosses and Dalrymple had maintained that the great Continent stretched over a vast area as far north as Tahiti and for thousands of miles east and west of it. And now, during many days, Cook had been sailing through it. Standing back to the north, and then in the main south-west, he at last had his reward.

On 7th October, 1769, he sighted high land to the west, in latitude 38° 57'. Was this the Great South Land? It might well be, for, as they stood into a bay (still called

¹ Cook, came, later, to doubt whether Tupia had so extensive a knowledge; and he thought that Bougainville had exaggerated the distance of Polynesian voyaging. (Cook's Third Voyage, I, 177.)

Poverty Bay, as Cook named it)¹ they saw several canoes, people on the shore, buildings behind, and at the back of all high mountains, "cloathed with wood and verdure." Cook's first meeting with the Maori was, however, unfortunate. He made the mistake of going ashore with too few men, and also left a boat, with four boys in, almost unguarded. This the "Indians," as he calls them, were about to seize, and carry off the boys, had not muskets been fired, killing one of the assailants. Next day Cook brought on shore more men, and Tupia spoke to the natives soothingly in Tahitian, which they quite understood; but nothing would stop their rapacity until musketry killed one and wounded three more.

Leaving this "Poverty Bay," Cook coasted along southwards, meeting generally with defiance and hostility. In part of Hawke's Bay (which he thus named after the First Lord, Admiral Hawke) bartering went on at the ship's side until one canoe's crew sought to carry off Tupia's native boy, and would have done so had not two of the cannibals been killed by musket shots. Hence the name "Kidnappers Cape." Finding the people to the south equally hostile and the coast unpromising, he put about at "Cape Turnagain" (latitude 40° 34'S.) and sailed northwards. In the warmer districts farther north he found the Maori less fierce and ready to trade, offering their yams and sweet potatoes, even the paddles of their canoes, for hatchets and big nails (they had never seen iron before, being in the Stone Age).

In a great bay and river (the Thames) Banks admired "the finest timber I ever beheld"; and in this district he and Solander could botanise without danger from the natives, who were very different from the fierce cannibals of Poverty Bay and Hawke's Bay. After a stay in the glorious Bay of Islands, Cook at last sighted the northern tip of the land, and there (like Tasman 127 years before)

¹ The name is a misnomer; for much of the land there and further south is good.

³ J. Banks, Journal, p. 201.

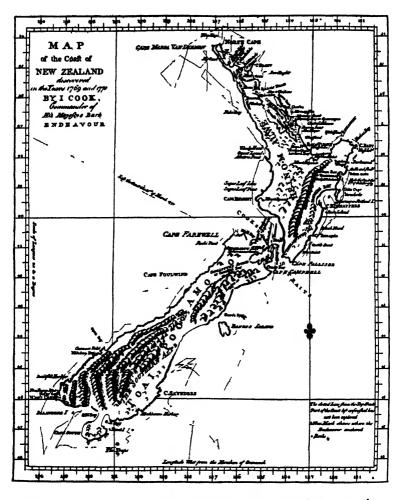
he noted in rough weather "the large swell rowling in from the west" which denoted open sea in that quarter. Hereabouts he passed near, but did not sight, a French trading ship commanded by de Surville. Then, coasting southwards along the dangerous lee shore and past the giant sugar loaf mountain ("Mount Egmont"), he entered a great bay where the strong current at length warned him that he must be in a strait. It was so; and it is fitly named Cook Strait. After passing through it, he turned to the north-east until he saw the outline of "Cape Turnagain," and thus, after four months' sailing, proved that what he had circumnavigated was a great island, now called the "North Island" of New Zealand.

After refreshing his crew in a sheltered flord, Queen Charlotte Sound, he set about exploring the shores to the south, surveying them with the minute care which makes his coastal map of New Zealand still valuable. As will be seen in his chart reproduced on page 199, there were only two serious errors. The first was in thinking Banks' Peninsula an island; but this error was due to his there putting far out to the south-east in search of land which his lieutenant, Gore, stoutly maintained was there, whereas it was only a bank of clouds; consequently Cook believed the projecting Banks' Peninsula to be an island. The second mistake was due to bad weather; for, at the extremity of what is now called "South Island," mists and variable winds compelled him to stand out from what he believed to be a bay, though it is really a strait separating South Island from Stewart Island. High westerly winds also prevented a full examination of Dusky Bay or of the ironbound coast further north, until, on the forty-sixth day he reentered Cook Strait and thus proved that New Zealand consisted of two large islands with a coast line of over 2000

¹ See Dr. J. C. Beaglehole, Exploration of the Pacific, p. 291 for that expedition, which was a failure.

⁸ Named after one of the Admiralty officials.

BOUGAINVILLE, COOK AND PROBLEMS OF PACIFIC 199 miles—another blow (as Banks noted) to the theory of a great southern continent. But he had found the finest home for the white race yet discovered by any



explorer of the southern hemisphere; and that, too, in spite of the description of the Maori by Parkinson, nks' draughtsman, as "cannibals, accustomed to the

carnage of war from infancy, and peculiarly undaunted," while those of the South Island were "a set of poor mean wretches, who . . . want the spirit or sprightliness of those of the North Island. . . . Their canoes are but mean."

In Queen Charlotte Sound Cook again laid in provisions and had to face the problem—where to find that elusive Continent. In his Journal of 31st March, 1770, he records his desire to return homewards by an immense sweep to the south-east in high latitudes towards Cape Horn. But to do so would be to brave the coming Antarctic winter, with a crew now wearied, and a ship battered by gales—risks which even Cook counted too great; for his zeal was always tempered by prudence, the fruit of long experience. Neither could he under-take without grave danger a long sweep in a southwesterly direction, against the prevalent winds, into the far south of the Indian Ocean and back to England by the Cape of Good Hope. Therefore, after consulting his officers, he decided to take an alternative course allowed him by his secret Instructions, and sail for the east coast of New Holland, follow it to the North and try to "fall in with the land or islands discovered by Quiros." Here, truly, was a safe but still an attractive alternative. Cook knew not that it would lead him towards the "isle of continent" on its most fertile side. And once more we note that the Admiralty, in prescribing a search in the far south-west of the Pacific, opened up this glorious prospect.

Again Cook proved to be an ideal executant of its plans. On 19th April, 1770,² after a nineteen days' run from Cape Farewell, he sighted at Point Hicks in latitude 37°58′ the south-east of a land which he reckoned to be not far from the east coast of Van Diemen's Land. Had he not been driven north by a hard southerly

¹ Parkinson, S., Journal in . . . H.M. Bark, Endeavour, London, 1773. For their canoes see my Chapter IX.

Really 20th April; for Cook had lost a day in circumnavigating the globe.

gale on the previous day, he might have run into the great bight which we know as Bass Strait. By this piece of bad luck his landfall was near the south-east end of the province of Victoria. Even so, he concluded, "from the soon falling of the sea after the wind abated," that there was land to the south-west, and he doubted whether the coast now sighted joined on to Van Diemen's Land. Thus, as his object was to coast northwards up any land that he might find, he proceeded to the northeast past Cape Howe and a shore, "which had a very agreeable and promising aspect, diversified with hills, ridges, plains and valleys." In this verdict, Banks and he agreed. So this was the first time that white men had anything good to say about Australia, for all their predecessors had struck that land on its weather-beaten, almost barren sides of the west and north-west. Thanks to the forethought shown in the Admiralty secret Instructions, Cook approached both New Zealand and Australia on their eastern and as yet unexplored coasts. Both Banks and he were hopeful as to the fertility of this new land. But on 29th April, when they entered a bay further north, Cook called it in his log Sting-Ray Harbour. Only in a later chart does it appear as "Botany Bay." But Parkinson gave a better verdict about that inlet. He described the shore as fertile and abounding in flowering shrubs so that "from the number of curious plants we met with we called the bay Botany Bay." He, then, seems to be the author of that much disputed name.

Cook's full description of that bay and of the long eastern coast line cannot even be summarised here. The accuracy of his survey may be seen by comparing his chart of 1770 with the surveys carried out up to 1890. Cook's work is at fault only as regards secluded inlets, like Port Jackson, which he had no time to enter. Off

¹ G. A. Wood, pp. 420-25, proves that it was Cook, not Banks, who praised Stingray Bay. The *Hist. Records of New South Wales* (I, 19 ff.) prove Hawkesworth's version of *Cook's Voyage* to be often wrong.

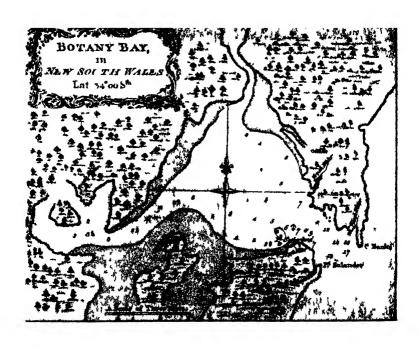
that glorious but almost hidden harbour he wrote in his Journal, Sunday, 8th May, 1770:—"About two or three miles from the land abreast of a bay, wherein there appeared to be a safe anchorage, and which I called Port Jackson." Like a careful seaman Cook sailed some three or more miles out from that unknown shore, and further out still as he proceeded along the jagged coast of what we call Queensland. He was nearing the inner fringe of the Great Barrier Reef, the mightiest and most dangerous in the world.

Cook had sailed more than half round the globe without encountering grave peril. He had shown himself a highly skilled navigator and explorer, equable in temper, sound in judgment, careful of the health of his crew, beloved by them and by the natives whom he studied with sympathetic zeal, unrivalled at charting coasts, and a correct chronicler of events, which he later described in a convincing narrative. But it is in deadly danger that the great seaman stands forth supreme. Off Cape Tribulation (lat. 16°) on 11th June, signs of rocks and of shallowing water had led Cook, early on a fine moonlight night, to stand on through a deeper stretch under easy sail, when, of a sudden, the Endeavour struck fast on the tail of a coral reef. At once he ordered sails to be taken in and boats lowered to examine her position. She lay pierced by a rock in a hollow of the reef, motionless but for the heavy beating of the ocean swell, which soon carried away her false keel. Destruction seeming imminent, Cook ordered six guns, casks of stores, ballast, etc., to be heaved overboard, also anchors to be carried out to windward to steady the ship.2

So passed that awful night, with incessant toil at the pumps; for the *Endeavour* heeled over and leaked badly with ebb tide; but what would happen at next high tide (II a.m.) if the breeze freshened? Dawn showed the

¹ Cook's Journal, p. 249. Mr. (later Sir) George Jackson was a Secy. of the Admiralty.

² Parkinson, p. 142.





nearest land eight leagues distant; but now the breeze died away and the sea calmed. With the flood tide, however, the ship righted herself and widened the leak; so the water poured in and defied their efforts at three pumps. Nevertheless, Cook, resourceful as ever, ordered the jettison of everything that could be spared, and then sent off a boat to carry out astern a ship's anchor with a cable, which the crew then hauled in by the windlass, so as "to heave her off the rock." This daring plan of his succeeded at 10.20 a.m., when the rising tide and the tug of the rope dragged her off the reef into deep Again there was an agonising struggle with the pumps against the leak, all on board taking their turn at the pumps fifteen minutes a time; but Cook resolved to "fother the ship by a sail," which was clogged with oakum and then carried out ahead by a boat's crew and thrust under the bows to the leak. By this device the inrush of water was checked and soon one pump alone kept the leak under. A landward breeze rising, they hoisted more sail, and at nightfall anchored well off the coast. On the morrow they made for an estuary which their pinnace had discovered two leagues away. There, in the mouth of the Endeavour River, where Cooktown now stands, they began the long toil of repairing their almost shattered barque, and found that the chief fracture was still almost closed by the piece of coral rock which had pierced it. They owed their preservation partly to this providential circumstance, partly to favourable weather, but equally to the unfailing resourcefulness of Cook. Under his calm but energetic control the devoted crew worked (says Banks) with unruffled courage and with a remarkable absence of oaths.

During their stay in that river (15th June-4th August) they saw several natives, who were whenever possible thievish, though Parkinson described them as "merry and facetious," and having canoes with outriggers—an advance, due doubtless to contact with the Papuans. But one party of four came alongside in a small canoe,

ten feet long, and propelled by poles, obviously only for use in shallows. As for the fauna, they marvelled at a creature "that bounded forward on two legs instead of running on four." But it provided tasty food, which, together with that of goats, wolves, birds, polecats, fish, turtle and shell fish, restored them all to full strength and supplied the provisions that Bougainville's crews lacked before their long trials off that coast.

Well was it for Cook, as later for Bligh, that their crews were refreshed before tackling the perils of the Barrier Reef and Torres Strait. Those of the mighty reef were appalling. Cook describes it as "a wall of coral rock rising almost perpendicular out of the unfathomable ocean, always overflown at high water, generally seven or eight feet—and dry in places at low water," on which the ocean billows broke mountains high. Again, on 17th August, after rushing inside through a fearsomely narrow gap, he writes:—"It is but a few days ago that I rejoiced at having got without the reef: but that joy was nothing compared to what I now felt at being safe at anchor within it." Yet he had to struggle on with all speed towards Batavia; for the south-east Trade Wind which now helped him northward, would in November change to north-west, and thus prevent his reaching that port, the nearest place for thorough repairs to his patched up ship.

Cook believed "that this land did not join to New Guinea. But this I hope soon to prove or disprove. The islands discovered by Quiros lies (sic) in this parallel, but how far to the eastward it's hard to say. We are morally certain that he never was upon this coast." Nevertheless, Cook kept the Endeavour skirting this dangerous shore in order to prove whether or no it joined New Guinea. For, though Cook knew of

¹ Cook's *Journal*, p. 300 ff. G. A. Wood, p. 440 note, refutes the efforts of Dalrymple and some later critics of Cook to prove that early Spanish or French voyagers had visited that coast. The claim that de Gonneville had done so is utterly vague.

Dalrymple's arguments as to the existence of Torres Strait, he doubted as to their soundness. The only way to reach certainty was to sail through it. Great therefore was his joy on reaching the northern end of this perilous coast. At the tip, which he named Cape York after the late Duke of York, brother of George III, he landed (21st August, 1770), hoisted English colours and took possession of the whole shore line of some 2000 miles which he had discovered. Further west he had less interest in the coast because Dutch seamen had explored it. Moreover, to thread his way through the rock-strewn waters ahead with a leaking ship and a weary crew, taxed all their powers. But he now saw those waters to be a strait, "which until this day hath been a doubtful

point with geographers."

After landing in the south of New Guinea (3rd September) near Triton Bank, i.e. far to the west of Torres Strait, he noted in his Journal that he had seen in maps published in de Brosses' Voyages to the Terra Australis (1756) that—"the Spaniards and Dutch have at one time or another circumnavigated New Guinea." But that author did not name Torres, and evidently regarded the existence of a strait on the south of New Guinea as hitherto debatable. We are therefore justified in saying that the work of Torres and Prado had been forgotten; and that, for all practical purposes, Cook made known the strait to the world. He had rendered an even greater service by revealing the dangers of the Barrier Reef, thereby warning off future explorers from what was a gigantic death trap. Indeed, unlike most of his predecessors, he worked for all the world, and his detailed and accurate charts must have saved thousands of lives. National jealousies now began, though slowly, to be replaced by mutual aid, to the great gain of navigation.

¹ Cook did *not* name the coast. It was later termed "New Wales"; but the Admiralty copy and the one at Windsor name it "New South Wales." Hawkesworth's version is here again wrong.

The stay at Batavia for repairs was marked by a heavy mortality, only twenty of the crew being fit for duty; among the losses by death were Tupia and his boy. After a time of rest in Table Bay (which he much admired) he made for home, and on 13th July, 1771, landed in the Downs and proceeded to London. In a postscript to his Journal he proved his originality by drafting a new and comprehensive plan of explorations, such as was impossible in 1769, when he was merely an executant of Admiralty policy. He now pointed out that the best way of exploring the Pacific Ocean would be by way of the Cape of Good Hope, thence to the south of New Holland, thence to Queen Charlotte Sound for refreshment, leaving it by the end of September or early October, so as to have the whole summer for searching the South Pacific in high latitudes for the supposed continent; or, in case of failure, turn to the north and proceed with the Trade Wind to the west in search of islands:—"thus the discoveries in the South Sea would be complete."

The modesty of the great explorer appears strikingly in this postscript, which was probably written after Dalrymple and other champions of a great Southern Continent had tried to belittle Cook's achievement. In reality by sailing down far south in the mid-Pacific, by circumnavigating New Zealand and coasting along the east of New Holland, he had disproved the existence of any vast tract of land in the temperate zone. Still, as French explorers were active, and the Admiralty wished him to clear up that problem, he consented (now with the rank of commander) to lead an expedition of two Whitby-built ships, the Resolution (463 tons) and the Adventure (336 tons) which were equipped with the utmost care for the health of the crews. The Admiralty

¹ Cook, in the Introduction to A Voyage towards the South Pole and round the World in 1772-75 (2 vols., 1777), notes the need of a suitable ship of moderate draught, but carrying large stores, and able to take the ground: 40-gun ships, frigates and East-Indiamen are not suitable; none but north-country ships or colliers are.

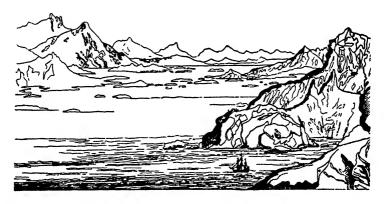
accepted his advice to sail by way of the Cape of Good Hope and New Zealand. After leaving Cape Town he put far to the south in the hope of sighting Cape Circumcision which the French explorer, Bouvet, had named in 1739, in the belief that it formed the north point of the Southern Continent. (It is a worthless islet surrounded by watery wastes.) Cook did not find it. Much farther to the west he crossed the Antarctic Circle—a feat never before accomplished; but during 117 days he was out of sight of land and often in danger from icebergs and the ice-pack.

After refreshing his weary crew in New Zealand, first in Dusky Bay and then in Queen Charlotte Sound, where he met the Adventure again, he proceeded east and south-east in search of Dalrymple's Southern Continent, but found only open waters with the "large hollow swell" of the ocean. At last, after being driven north to Tahiti by continued hardships which (says Forster, a German scientist on board) had reduced him almost to a skeleton, he returned to Queen Charlotte Sound to restore his crew to health (the Adventure by this time having separated in storms). Then again he assailed the southern waste of waters, once stretching as far south as 71° 10'—the farthest south of any white Again worn to the bone by privations and severe cold, he had to turn north and finally sighted Easter Island, where they marvelled at the gigantic statues. Thence voyaging westwards Cook thoroughly explored the New Hebrides (as he named them), and next discovered New Caledonia and Norfolk Island: the New Scots he found to be both friendly and honest. He then returned to New Zealand for a time of rest in his favourite sound—his advanced base for Pacific explorations.² For

¹ Sir C. Markham, *The Lands of Silence*, p. 395. For the voyages of Bouvet, Kerguelen and Marion see E. Heawood, *Geographical Discovery*, pp. 207, 236, 237.

The German scientist, G. Forster, Voyage . . . in H.M.S. Resolution (II, 455) praises the Sound for its fine air and anti-scorbutic plants.—"We always left it with new vigour."

the third time he sailed forth to find that elusive continent, far to the south of and beyond Cape Horn. Again he failed, but only because nothing was attainable in habitable latitudes. Yet on his homeward voyage he surveyed the south-west coast of Tierra del Fuego, especially Cook Bay, west of the Beagle Channel. There he anchored in Christmas Sound, of which the accompanying sketch was taken, showing the Resolution as a mere pinnace far below. Rounding Cape Horn on 29th December, 1774, he next re-discovered, in the South Atlantic, South Georgia, and discovered the Sandwich Group about latitude 59° S. and longitude 28° W.—



H.M.S. "Resolution" in Christmas Sound

both of them being in the midst of Dalrymple's Great South Land. He then expressed the belief that there must be a large tract of land near the South Pole; owing to the many islands, the excessive cold and the vast floats of ice encountered in the far South—a surmise equally shrewd and correct. Quitting this "poor apology for a Continent," he made for the Cape and then England, which the Resolution reached without the loss of a topmast during more than three years.

Does not the world owe him eternal gratitude for

heroic perseverance with a programme which he believed to be illusory? Has any man ever worked so long and desperately to dispel the illusion of a great, populous and wealthy southern continent? Surely never. All friends of peace must hail his memory as that of a man who exploded what was a baneful legend, breeding jealousy among the European nations. Finally, all friends of sailors must admire his unceasing care for the health of his crew, especially by his intelligent use of that advanced base, Queen Charlotte Sound, which enabled him thrice to defy the rigours of the Antarctic, and yet, during those long and very trying efforts, lose by illness only one man out of 118—a striking contrast to Vasco da Gama's loss of 115 out of 170 from four ships in his voyage to and from Calicut (1497-99). Richly, then, did Cook deserve the Fellowship of the Royal Society awarded to him early in 1776.

In his third voyage (1776-79) Cook (now at last captain) measured his skill and strength against that most baffling of problems, the North-West Passage. quest had gripped the attention of far-seeing merchants of Bristol and London ever since the year 1527, when their spokesman, Robert Thorne, begged Henry VIII to discover "the short way to the Spicery by our Seas" and "in the backe side of the New Found Land."1 Obviously England would benefit by the discovery of such a route; and from the time of the Cabots strenuous efforts had been made to find that short cut to Japan, China and the Spice Islands. On this alluring but delusive quest, Frobisher and other English sailors ventured far into polar seas with myriad hardships and no result. The first to suggest an attempt from the Pacific to the Atlantic was Drake, who, when off New Albion, proposed to explore "what passage there was to be found from the South Sea into our own Ocean," about latitude 66° N.—a singularly good guess at the eastern exit. But finally he was deterred by the deepening

¹ Hakluyt (Everyman Ed.), I, 216, 230.

cold and fogs. Dampier, as we have seen, had the same vision; but his pals preferred the run to the Spice Islands.

Not until the voyages of Bering (1728-41) was the legendary "Anian" strait between Asia and North America discovered. He, a Dane in the Russian service, completed the Russian discoveries of Kamchatka, struggled through the strait named after him and caught glimpses of Alaska.¹ But he had to put back and encountered hardships and disease which led to his death and that of thirty others by scurvy on one of the Aleutian Islands. These terrible experiences emphasised the need of finding further south a channel connecting the Atlantic and Pacific Oceans. For the idea still persisted that there must be such a passage; and hopes had long centred in Hudson Bay. When, in 1713, the Peace of Utrecht placed Great Britain securely in possession of that bay, expeditions set forth to explore the west coast of that vast inland sea. In 1719 certain merchants sent out Captain Barlow to find the short route to China. He and his crew were never heard of again, though in 1748 the wreckage of his ship was found in the bay. In 1722 Captain Scroggs reached latitude 64° 56' and, there, mounting a headland, sighted a channel to the south-west, whereupon he tamely returned. In 1741-42, Captain Middleton made repeated efforts to find a western passage, but in vain. Nevertheless, in 1745 Parliament voted a prize of £20,000 "to the owner or his assigns" of a ship that should discover, and sail through a passage to the Pacific; but seamen apparently regarded the offer, with that cautious proviso, as an official joke.

Meanwhile Russians from Alaska were working southwards, and Spaniards from California northwards; but

¹ See Golder, F. A., Bering's Voyages (2 vols.), and good summaries in Heawood, pp. 264-67; Baker, J. N. L., Geographical Discovery, pp. 157-58.

² Anderson, Origin of Commerce, III, 246; "Geography of Hudson's Bay," with the log of Capt. Middleton, ed. J. Barrow (Hakluyt Soc., 1852).

nothing much resulted except trade with the Indians and the prospect of a struggle between those two Powers for that great coast-line. In 1765 Byron (as we have seen) neglected his orders to try and find a strait through to Hudson Bay. In 1774 the Spaniard Perez explored parts of the west coast up to latitude 55°, and in 1775 Quadra reached 56°. At last, in 1776, Great Britain made a bid for the shores of what is now British Columbia. Thus, in the year which witnessed the beginning of the disruption of the Empire, occurred also an event which opened up a new avenue for expansion.

Following Cook's advice always to sail via the Cape of Good Hope for the exploration of the Pacific, the Admiralty issued secret Instructions (July, 1776) that he should proceed by that route for the "search of a North-East or North-West Passage from the Pacific Ocean into the Atlantic Ocean or the North Sea." Again, then, he was allowed wide latitude so long as he avoided contact with any Spanish settlement in the Pacific, a rupture with Spain being then not unlikely.1 He was to coast along New Albion as far as latitude 65° N., and thereabouts very carefully search for and explore all considerable rivers or inlets "pointing towards Hudson's or Baffin's Bays"—a proof of the utter uncertainty still hanging over the North-West. The recent efforts of Samuel Hearne to find by land "a new passage into the South Sea" had in 1771 taken him down the Coppermine River to the Arctic Ocean and thence back to the Great Slave Lake. Yet somehow (perhaps owing to the legendary cruise of de Fuca soon to be noted), the hope persisted that there might be such a passage about, or north of, latitude 65°; and the reward of £20,000 offered in 1745 for such a discovery was now renewed.

¹ The freedom allowed to Cook contrasts with the cramping exactness and close timing of other Instructions, e.g. of Tasman and La Pérouse. The latter was probably hampered by them. See a summary in P. Mantoux Voyage de Lapérouse. The unfortunate French explorer largely modelled his efforts on those of Cook.

It was a forlorn hope; yet even so, Cook accomplished marvels with H.M.S. Resolution and Discovery. For his bold plan of sailing across the Pacific from New Zealand to New Albion struck right athwart the well-beaten track of Magellan, which had yielded very few discoveries. His reward was the discovery of Christmas Island and next the Sandwich (Hawaiian) Islands (January, 1778). His claim to have discovered the latter group has been denied on the claim that a Spaniard, Juan Gaëtano, had sighted those islands in 1555. This claim is doubtful; and a recent examination of the evidence by Bishop Resterick of Hawaii seems to disprove it. Certainly at that time the Spaniards knew nothing whatever about these islands.¹

Cook was "agreeably surprised to find that the Hawaiians spoke the language of Otaheite (Tahiti) and of the other islands we had lately visited." Indeed in his three voyages he was the first to prove and record the extraordinary fact that the Polynesians had spread all over the Pacific "from New Zealand in the South to the Sandwich Islands in the North, and from Easter Island to the New Hebrides, i.e. over 60° of latitude and over 83° of longitude: . . . certainly it is the most extensive nation upon earth." The statement illustrates his exact observation and powers of reasoning. Further, his careful study of those peoples—their tools, weapons, canoes and customs—entitles him to a very high place among Pacific ethnologists.

In kindliness, keen curiosity and expert thieving the Hawaiians resembled other Polynesians; but, unlike the Maoris in 1769, they fell flat on their faces when Cook landed, as before a god, and they offered gifts, especially pigs, to "Orono." During the fortnight there his relations with the islanders were fairly cordial in spite

¹ Resterick's conclusion is endorsed in a paper by P. C. Morris to the Hawaiian Hist. Soc. (see its *Report* for 1933).

² Cook's Third Voyage, II, p. 254.

of much thieving; and by barter his two ships procured so large a stock of provisions and fruit as to arouse pity for Anson and his famishing crew who knew not of the existence of these large and fertile islands not far from his track. Cook's discoveries now robbed the centre of the Pacific Ocean of its terrors. Indeed, he is the chief revealer of that ocean, from the Antarctic to the Arctic, from New South Wales to Alaska.

A run of thirty-three days brought Cook's ships to the shores of New Albion. Coasting along northwards, he encountered adverse winds and boisterous weather, which, driving them out to sea, probably accounts for his missing the entrance to Juan de Fuca Strait—one of the very few important misses of his career. At last, at the end of March, he made land near a fine natural harbour, Nootka Sound. Canoes at once came out and Indian orators extended a formal welcome and offers of barter. Trade with the Spaniards had sharpened their wits, which, as in Oceania, were directed largely to the acquisition of metals either by bargaining or thieving. Cook found them docile, courteous and indolent, good-natured but quick to resent an affront. Their canoes, made of hollowed out trees, had no sails or outriggers, which (adds Cook) "distinguishes them from the Pacific islanders and the south of the East Indies." During a month's stay the Indians remained eager to barter skins and furs for metals, either iron or brass; and the trade thus happily begun was to lead to further intercourse in the future; for among his crews were Portlock, Meares, Colnett and others who noted the cheapness of furs at Nootka and the beginnings farther north of Russian trade with China. These men and others subsequently formed the King George's Sound Company and opened a promising trade with China. In 1787, Captain N. Portlock recorded that this opening encouraged a Canadian (probably Peter Pond or Alexander Mackenzie) to attempt a passage over the intervening mountains in order to extend the Canadian fur

trade to the coast. So Cook's third voyage "opened to

commerce several extensive prospects."1

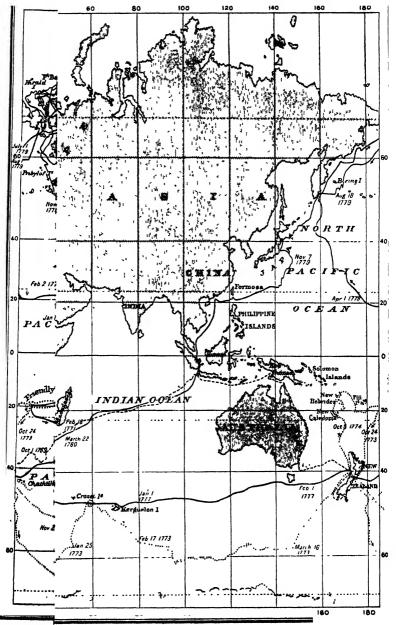
The effort of Spain in 1789 to stamp out the Nootka settlement and trade brought stiff and successful resistance from William Pitt,² who sent out one of Cook's men, George Vancouver, to hoist the British flag and make discoveries. His survey of the coast of north-west America up to latitude 63° was so thorough as to prove that no North-West Passage could exist in habitable latitudes. He thus refuted the much talked of reports of the Greek pilot, de Fuca, to have sailed, about latitude 47°, into a great inland sea which brought them near to Hudson's Bay (1592-3). Vancouver also proved the insularity of the whole Nootka area, which therefore bears his name.³ But our first title to British Columbia was due to Cook.

Sailing away from Nootka Sound on 26th April, 1778, towards the north-west, he encountered a hurricane which swept him far from land, and he sighted none until he neared Capes Fairweather and Suckling. Farther north he explored a great bay, which he named after Prince William, but it led to no channel eastwards. In latitude 59° he entered a deep gulf running to the north-east, which aroused high hopes. These hopes faded as the water became brackish and then almost fresh. "So (writes Cook) I was convinced we were in a large river, and not in a strait communicating with the northern seas. But I was desirous of stronger proofs"—a sign of the true explorer. Further struggles to the east brought him to muddy and quite fresh water; and the

¹ N. Portlock, Voyage to N.-W. Coast of America, pp. 2, 294. Mackenzie finally reached that coast in July, 1793, and recorded that fact in an inscription on a rock. Cook's second voyage also stimulated the southern whaling industry, which started about 1778. In 1785 it sent out 18 ships producing £29,000, and in 1787, 38 ships producing £107,000 (Anderson, Origin of Commerce, IV, 689). Whale oil proved to be a very good lubricant.

Rose, J. H., Life of William Pitt, Vol. I, Chap. 25.

² See G. Godwin, *Vancouver*. In Feb., 1794 he annexed Hawaii; but the British Government annulled that act, probably in order not to offend Spain.



Face p. 215

"master's" pinnace, exploring the northern inlet up to 61° 30' North, reported the same disappointing results.1 Very fitly, however, did the Admiralty afterwards name this gulf "Cook Sound." Signs of Russian trade began to appear as they struggled round the long Alaska Peninsula and then north towards Bering's Strait. There Cook named the westernmost tip of America after the Prince of Wales. He also noted with interest the habits of the Esquimaux (as years before he had observed those of the Labrador natives) and in particular the ways in which Russian traders had in part improved and in part cowed them. As for their canoes, they resembled those of the Greenlanders, the framing being of slender laths, and the covering of seal-skins; they carried one man who sat in the round hole near the middle, but a second could lie down at the bottom. Helped sometimes by the Russians, and always by the natives, Cook struggled into the Arctic Ocean; but along the north-west coast of Alaska the difficulties from ice increased, and off Icy Cape he resolved to desist from what was, after August, an impossible quest. He now planned to winter at the Sandwich Islands, using them as an advanced base for the next attack on the North-West Passage. Alas! he met his end at the hands of those islanders (14th February, 1779).2

The career of Cook is remarkable for the steady growth of faculties which make for success—constancy and fortitude learnt in early struggles, tenacity in the pursuit of well considered plans, keen and close observation both of man and of Nature, and a sound judgment that ripened with difficulties and nearly always triumphed over them. Such was the make-up of this stalwart Yorkshireman, whose quiet but firm demeanour, unfailing sincerity, mental alertness and friendly ways that rarely were marred by faults of temper, gained the respect

¹ Cook's Third Voyage, II, 391.

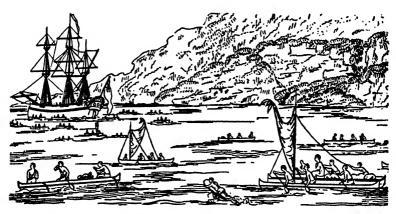
² See Appendix III—"Charges against Captain Cook in Hawaii."

and affection of all men, of all classes, in all lands. His rise from a humble station to the rank of captain in the Royal Navy and the honourable position of Fellow of the Royal Society was highly creditable alike to him and his country; for, though his second and third voyages aimed at the unattainable, yet he cheerfully and intelligently pursued both quests and retained throughout the loyal and unswerving support of his officers and men amidst hardships worse than those which baffled Bougainville off Papua.

Like all great men, he inspired others to carry on his work. Among his pupils were Vancouver and others who opened up North Pacific trade; also Bligh, the hero of the greatest voyage ever made in an open boat; and he in his turn trained Flinders, the first circumnavigator of Australia. Thus Cook's influence lived on in widening circles. Indeed, he attained by kindly means far more than any martinet could snatch at by harshness. Omai, the native of Huaheine, who accompanied him to England and was brought back to his island in 1777, wept bitterly on leaving Cook. Also during the last outbreak of the Hawaiians the captain conducted the retreat to the boats (a hazardous operation, as we saw in Chapter I) with some loss but no panic; and survivors recorded that only when he turned to order "cease fire" did the foremost assailants dare to stab him, and in the back. Then they rushed on him and held him down By a dying effort he raised up his head for a moment or two. What were his thoughts as he caught a last glimpse of sky, sea and men? Doubtless he forgave them, for he lay there only because he had sought to spare their lives. But now -..

His end was a mysterious tragedy; for he had ever befriended natives. Even the murderers soon lamented their deed, and asked, weeping, whether Orono would not come back. His death was a loss to them and to the world at large. For he was ever thoughtful for their welfare, and he might still have accomplished wonders

in the spheres of exploration and ethnology, possessing as he did keen interest in man and Nature, unequalled experience in coastal surveys, an unflinching will in the execution of orders, and untiring patience in collecting all the relevant evidence. Accordingly, he merits the verdict placed by his widow on the memorial tablet in St. Andrew-the-Great Church, Cambridge-Nil intentatum reliquit. And these qualities were crowned by



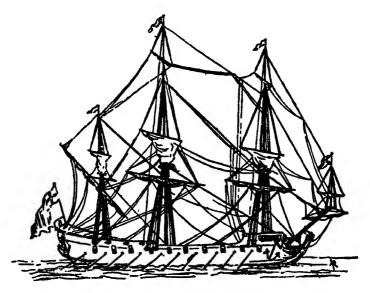
H.M.S. "RESOLUTION" IN KARAKAKOOA BAY, HAWAII

sound judgment. Never did he jump to a conclusion as to a prominent headland being the tip of the Southern Continent. Like a trained hydrographer he examined headland or gulf, river or reef, with all possible care. Therefore nearly all his conclusions have stood the test of time; and his charts, like his accounts of natives, are of high value even to-day.

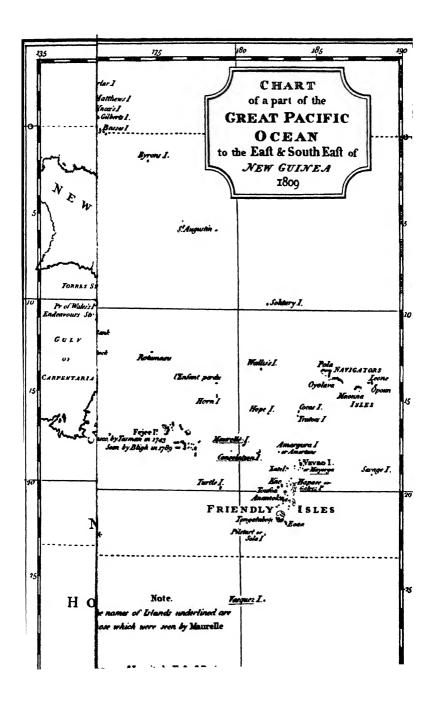
Well, then, did La Pérouse accord to Cook the praise quoted at the head of this chapter. And Sir Clements Markham, himself a distinguished explorer and critic of explorers, hailed him as "first in the glorious roll of maritime discoverers, not only in his own time but for all time." This panegyric is fully deserved; for Cook

¹ Clowes, Hist. of the R. Navy, IV, 123.

in his first voyage not only discovered but accurately charted more than 4000 miles of habitable coastline; in his second he dispelled the dangerous legend of the Great South Land and revealed the true South, along with many new islands; and in his third he cleared up the mysteries of the central and north-east Pacific, besides opening up the north-west American shore to trade and future colonisation. In the handling both of ship and crew during three long and trying voyages, he stands forth a great captain; while his speedy and successful grappling with the dreadful crisis on the Barrier Reef bespeaks the consummate seaman. Further, by his keen interest in natives and their customs he excels all previous navigators. Finally, no conqueror won for mankind by long and bloody wars a tithe of the new homelands which James Cook opened up by peaceful means.



EARLY 18TH-CENTURY SHIP USING SWEEPS



CHAPTER XI

SEA POWER PERSUS LAND POWER (1803-14)

"Je veux conquérir la mer par la puissance de terre."
(Napoleon, 6th Dec., 1806.)

This statement of the French Emperor in a letter to his brother, Louis, King of Holland, explains his motive in launching recently the Berlin Decree against England and thus inaugurating the Continental System. Thereby he aimed at more than merely curbing the maritime supremacy won for her by Nelson's last and greatest exploit; he sought to replace that supremacy by one founded on a Franco-Dutch-Spanish-Italian league preluding a Pan-Continental Union against the British nation. At that time the scheme seemed quite feasible; and my purpose here is briefly to examine the formation, rise and fall of the mightiest Land Power ever embattled against a Sea Power. In truth, the last phase of the struggle, in 1810–12, became almost one between the two elements.

For the first time in history such an alignment became possible. After Austerlitz and Jena, Napoleon had Central Europe at his feet, while resurgent Poland was on his side and Russia's power had waned. Italy, Spain and Portugal being largely under his control, he had all Western, Southern and Central Europe with him; and the position of Louis Bonaparte on the throne of Holland promised greatly to add to Franco-Spanish naval resources; while the great colonial empire of the Dutch was ranged along with those of France, Spain, and Portugal. Thus, the prospect foreseen by Bougain-ville while he was in Java (see p. 191), of the lapse of the

Dutch colonies to France, had now come to pass. Also her control of the Dutch fleet and harbours enabled her to threaten the mouth of the Thames and to harass British commerce in the East and West Indies. What wonder that, even after losing Germany, Napoleon should write: "Holland is French and will remain so for ever." Indeed, she was an essential part of his anti-British bloc. If the land mass completed in 1810 could overbear sea power,

England was doomed.

But sea power, wielded by hardy enterprising islanders, is not easily overborne. Since 1587, when Drake's blow at Cadiz "singed the King of Spain's beard," English seamen had known the worth of a timely thrust, and other crises had taught them seamanship, strategy, tactics, and the need of securing mastery at sea. Moreover, Britain's hold on Ceylon and Trinidad since 1802, her re-conquest of the Cape, and several of the West Indies, along with the growth of the young settlement in New South Wales, marked her out as supreme in the outer world. Rich in her unequalled industries and world commerce, she was the ideal Sea Power; and fleets now counted for more than was the case a century before. In fact, the operations of fleets, secretly and steadily directed towards the destruction of hostile fleets and commerce, are perhaps more effective than military action in finally wearing down the enemy's strength and morale, as was proved by the exhaustion of France in 1748 and 1801, even amidst the triumphs of her armies. In both of those years French and allied fleets and commerce had been swept from the seas; and France though triumphant on land, perforce made peace with the victorious islanders.

Nevertheless, the resulting peace treaties of Aix-la-Chapelle and Amiens differed sharply. In 1748, the virtual stalemate between sea power and land power led to the natural result, the status quo ante bellum. Yet in 1801, even with this example before them, the weak

¹ Lecestre, Lettres nouvelles de Napoleon (Nov. 6th, 1813).

Addington Cabinet signed preliminaries of peace, leading on to the Treaty of Amiens (March, 1802), which not only handed back to the French and their allies all the colonies (except Ceylon and Trinidad) taken by the British Navy since 1793, but also left to Bonaparte (First Consul of France) nearly all her conquests in Europe. By this lopsided contract he became supreme on land, and was emboldened to grasp at maritime supremacy by gaining almost entire control over the Dutch, Swiss, Genoese and Italian Republics, which (along with the Spanish alliance) promised ultimately to give him a greatly superior navy. Thus, at and after Amiens, the islanders lost not only valuable strategic points like St. Lucia, Guadeloupe, the Cape of Good Hope and Pondicherry, but also the maritime security recently attained by the triumphs of Nelson and his compeers.

As a settlement of a ten years' struggle between a Land Power and a Sea Power, Amiens was both a folly and a disaster. For though Addington and his colleagues hoped for a lasting peace and friendly intercourse with France, their complaisance was taken for cowardice—witness the outburst of the Anglophil Russian ambassador at London—"This inept and cowardly band has yielded at all points to Bonaparte for fear of war which they are incapable of waging:... the most shameful treaty for England since the reign of Charles II." Yet, in October, 1801, Lord St. Vincent, First Lord of the Admiralty, praised it as the very best this country ever made." And in 1802, Nelson (a strong supporter of the Addington Ministry) subordinated seamanship to politics by declaring that Malta and the Cape of Good Hope were of secondary importance, the latter being merely "a tavern on the route to India." When

¹ Woronzow to Lord Grenville, 30th March and 11th April, 1802 (Dropmore Papers, VII, 93). I agree with Adm. Prof. Sir H. Richmond (Sea Power in the Mod. World, p. 37) that a Sea Power is one whose naval strength enables it to influence the policy of the great nations.

² Earl of St. Vincent's Letters (ed. D. Bonner Smith), I, 285.

Napoleon's actions became threatening, our great seaman revised these odd opinions.¹ Most of our statesmen, notably Windham and the two Grenvilles, utterly condemned the treaty; while Pitt damned it with faint praise. But Bonaparte damned it effectively by continuing, as if in war time, to bar out British produce from all lands under his control. Worse still was its exclusion from all the colonies now handed back to France and her allies, which entailed on us a trade loss of over £10,000,000 a year.²

News from the Mediterranean also showed that Bonaparte, not content with regulating the Italian Republic and annexing Piedmont and Elba, was still intent on the East—"He has resolved to pilfer Malta"—so wrote Italinsky, the Russian ambassador at Palermo.³ Already the Maltese, on hearing that the treaty would hand them over again to the Order of St. John, protested to the Addington Cabinet that this would involve surrendering them to Bonaparte; for obviously his object in making peace with Great Britain was to get possession of Malta. Yet the Ministers refused to see the Maltese petitioners lest the Amiens negotiations be compromised.⁴

The dangers inherent in the treaty were soon apparent. Not only did its complex arrangements for re-establishing the almost moribund Order of Malta prove unworkable, but Napoleon (now First Consul for Life and wielding more than regal power) sent General Sébastiani on a "commercial mission" to the Levant, which proved to be anything but commercial. On 30th January, 1803, there appeared in the official *Moniteur* the report of his

¹ Dispatches of Nelson, III, 315; V, 37, 107. He stated that the sheathing of ships with copper lessened the number of cleanings and therefore the importance of the Cape.

² Castlereagh Correspondence, V, 25 ff. So too Nelson thought Napoleon's unfair treatment of our trade "the greatest act of hostility" (Dispatches, V, 12).

^{*} The Paget Papers, II, 42.

⁴ W. Hardman, History of Malta (ed. J. H. Rose), (1798-1815), pp. 410-23.

conclusions which envisaged a French re-conquest of Egypt and the Ionian Isles. At once Addington and his colleagues took alarm for India, which increased in March, when a French expedition set sail for Pondicherry. In view of these threats to dominate the overland and sea routes to India, the British Cabinet now insisted on retaining Malta for ten years. Napoleon declined, but slowed down the negotiations, obviously so as to save his expeditions to the West and East Indies. As delay would only further his plans, the British Government declared war (18th May, 1803). Just in time, it had discovered the truth later expressed by Metternich: "Peace with Napoleon is not peace."

Fortunately that great man lacked one of the qualities needed for the upbuilding of sea power—patient persistence. Though armies may be trained in a year or two, navies need a decade or two. Highly unwise, then, was it to hustle the islanders out of markets and threaten their East Indies, until his new fleets were fully ready, from Amsterdam to Venice. Instead, he pursued aggressive objects, both in Europe and the two Indies which revealed his purpose and gave three expeditions as hostages to fortune. Moreover, his aggressive actions welded our people into unity. In October, 1803, Wordsworth wrote:—

"In Britain is one breath;
We all are with you now from shore to shore;—
Ye men of Kent, 'tis victory or death."

In truth, the war which began in 1803 and spread over all the world, originated in deep-seated contrarieties between the Sea Power and Napoleon. As Sorel has well remarked, he never understood the English.² His clear-cut southern intellect never comprehended either their northern cloudiness or the odd weaknesses of their parliamentary system—then at its worst. Was not a

¹ Metternich, Mems., II, 208.

^{*} Sorel, L'Europe et la Rev. Française, VI, 625.

nation, whose fleets had swept the seas, contemptible when at the peace it gave up almost all their conquests? To a mind both forceful and logical that conclusion was natural enough; but he forgot that, behind parliamentary and diplomatic bungling, there was a brave nation, an invincible navy and Nelson and his "band of brothers." Verily, the Corsican never grasped the possibilities of sea power save in a Mediterranean setting.

The Sea and Land Powers now acted true to character, and the duel between the two elements was to continue on curiously even terms. Outwardly, the advantage seemed to lie with the land; for Napoleon's forces speedily overran Hanover and North-West Germany as far as the Elbe, confiscating Britain's property and excluding her commerce. Thus, by the end of the year 1803, British trade was shut out from nearly all coasts from Hamburg to Venice, except those of Portugal. Naturally, the Cabinet of London retorted by blockading, so far as possible, all coasts barred to our shipping. It is important to note that Napoleon's action in beginning to build up what, for the time, he called his Coast System against the islanders preceded their counteraction; and, despite the assertions of some continental historians, British maritime policy followed the aggressive acts of Napoleon on land right up to 1810.

Nevertheless, his plan of excluding British goods was not so deadly as it promised. For sea-borne trade is more fluid than that on land; and our dealings with the Continent through Holland and North-West Germany were now transferred largely to Danish ports, or, later, even to Stettin and the Oder basin. Amsterdam, Bremen and Hamburg suffered terribly; but English commerce with the Netherlands and West Germany did not cease; it found more distant routes, or else filtered in as contraband through neutral ports like Emden. The details, of course, still remain secret. But that our shipping

¹ Oddy, J. J., European Commerce (1805), pp. 419 ff.

and foreign trade did not suffer badly is clear from the following official returns¹:—

	Ships in general use in the British	Official Value of British Imports in £ (,000 omitted) from—		Official Value of British Exports in £ (,000 omitted) to—	
	Isles and Channel Isles.	E. Indies and China.	All other Parts.	E. Indies and China.	All other Parts.
1802	20,568	5,424	27,371	25,699	16,601
1803	20,893	5,794	25,647	26,993	19,127
1804	21,725	6,348	21,643	22,252	11,540
1805	(not included).	(not included).	23,993	23,934	13,537

The actual increase of British shipping during the war was due largely to its Navy blockading the fleets and watching the coasts of France. For under that farstretching shield our light squadrons sailed unharmed to the West Indies and there disposed of those sent thither by Napoleon in 1802, now weakened by disease; while in home waters our merchantmen found new channels of trade even with lands officially barred. Thus, thanks to our blockaders, the colonies tamely retroceded by Addington were soon recovered, and trade filtered into the Continent. Rarely has full justice been done to the transcendent services of our Channel Fleet off Brest during that astounding vigil of twenty-seven months, often in stormy seas off a rock-fanged coast; for that fleet under Admiral W. Cornwallis held the main French fleet landlocked. Soon after began Nelson's equally glorious watch of the Toulon fleet during twenty months, which, far from wearing down his unweariable crews, steeled them for Trafalgar. Together they stalemated Napoleon's plans for rolling up French, Spanish and Dutch fleets in a mighty mass for the destruction of Cornwallis, the domination of the Channel, and invasion of Kentfinis Britanniae. Instead, it was really finis Napoleonis. For his failure thenceforth to make headway at sea against the islanders shut him up to that alluring but delusive alternative of conquering the sea on land,

¹ Oddy, J. J., European Commerce (1805), p. 464.

i.e. of welding the Continent into a sea-proof bloc for

the ruin of "the nation of shopkeepers."

In truth, the Emperor underrated the efficiency of sea power for a lengthy blockade. The Nelsonic navy was on a par with Nelsonic genius. After generations of improvements (often borrowed from the French or Spaniards) the sail-of-the-line was now a perfect instrument both for blockade and battle. It was far more stable in stormy seas, more sanitary at all times and better able to carry large stores of food and drink, than the ships even of Anson's day. His Channel Fleet was the first to dare a full winter blockade of Brest; and well might his tars sing-

> "For our ships were always there, Though our poles were sometimes bare, When Anson ruled the fleet in 'forty-six.' "

Now, in 1803-5 the marvel had ceased, and two winter blockades off Brest called forth no song. Indeed, the historian has to dig out from our archives and Board of Trade returns details of the bull-dog watch of the navy off the Continent which at last impelled Napoleon to Moscow. Even in 1805 there are clear signs that his military way of regarding sea warfare sinned against the dictates of prudence. He burdened the Franco-Spanish fleet under Villeneuve-Gravina with a huge programme in the West Indies and a return to the Channel in an impossibly short space of time; and when those harassed leaders finally made for Cadiz, he hounded them outto Trafalgar. Well, then, may the leading French naval historian thus sum up:-"Though an incomparable strategist, Napoleon was not a sailor, and miscalculated the worth of his ships, crews and admirals."2

After Trafalgar, Napoleon directed his efforts chiefly against British commerce, both by guerilla tactics at sea and by building up an overwhelming land-mass against the isolated islanders, and thus starving their

¹ J. Leyland, The Blockade of Brest (2 vols., 1902).

² C. de la Roncière, Hist. de la Marine française (1934), p. 216.

commerce. He had some grounds for expecting that result; for he wielded vast resources in the new and well-organised French Empire and its dependent States. Also the oversea lands were little developed, and their trade with us seemed almost negligible by comparison with Anglo-Continental commerce, witness the official returns of numbers and destinations of ships clearing out from British ports during the year 18061:—

To-

Denmark and Norwa	y	• •	• •	1374
British West Indies		• •	• •	652
Germany	• •	• •		618
Russia	• •	• •		591
United States		• •		538
Holland		• •		455
British North Americ	a	• •		343
Sweden				318
Portugal and Madeira	a			311
Prussia				216
Africa				170
East Indies				63
Italy				61
France				36
Malta				25
West Indies (foreign)				15
Cape of Good Hope				14
Danzig				14
New South Wales				2
	• •	••	• •	_
Total	• •	••	••	5816

The commercial priority of Europe at that time over the other continents is remarkable; for only 1099 of our sailings in 1806 were to the colonies; whereas nearly 4700 ships (i.e. deducting 15 to foreign West Indies and a few to Madeira) sailed to European lands, though we were at war with France, Spain, Holland, and the greater part of Germany and Italy. And though larger ships were used for long distance voyages than for short voyages, and in these last the same ships might clear out

¹ Commons Journals (1808), App. 42. I have found no table similar to this.

more than once, yet, on the whole, we may reckon our colonial trade as being in 1806 little more than one-fifth of that to the Continent of Europe. Another noteworthy fact is the importance of our West India trade, far exceeding that with all our other colonies combined.

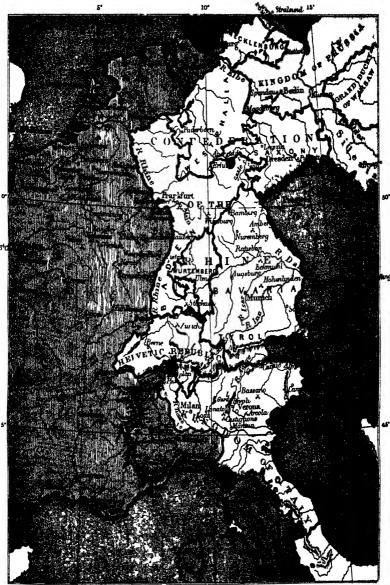
The following table gives a bird's-eye view of the yearly acquisitions of the Sea Power and Land Power during 1803-12:—

(N.B.—Asterisks denote gains retained at the general peace in 1814: *italics* denote temporary annexations lost in 1814: items bracketed denote extensions of fiscal control or political alliance.)

extens	ions of fiscal control or political all	iance.)
	Sea Power.	Land Power.
1803	*St. Lucia, *Tobago, *Demerara, *Essequibo, *Berbice, Pondicherry.	Piedmont, (Holland), (Han- over), (Italian Republic), (Genoa), (Switzerland).
1804	Surinam.	(Spain—up to May, 1808).
1805		Genoa, Etruria.
1806	*Cape of Good Hope, (Sicily)	(S. Italy), (Confederation of the Rhine), (Prussia).
1807	Curaçoa, *Heligoland, Most of Danish West Indies, (Madeira).	(Russia).
1808	Mariegalante, Désirade. (Alliance with Spain and and Portugal.)	(Austria), Corfu, Zante, etc.
1809	Anholt, *Zante, *Cephalonia, Cerigo, Senegal.	Papal States, Austrian sea- board provinces.
1810	Lissa, Guadeloupe, St. Martin, The Dutch Spice Islands, *Mauritius, I. de Bourbon, *Seychelles.	(Sweden), Holland, Hanover and NW. Germany, Canton Valais.
1811	Java.	
1812	(Alliance with Russia and Sweden.)	
Ţτ	will be seen that the	territorial balance was

It will be seen that the territorial balance was on the whole in favour of Napoleon until his mad provocation of the Spaniards in 1808 threw them and their colonial empire into the arms of the islanders. Now at last these found, in Portugal and Spain, what

CENTRAL EUROPE IN 1812



they had generally lacked in the wars with France, a firm fulcrum on land against her. Also the greatest master of defensive warfare was at hand—

"The statesman-warrior, moderate, resolute;"

and, as he admitted, the British navy regularly brought him reinforcements and supplies, while the French armies received them intermittently owing to interception by Spanish irregulars. Besides, our merchants found in Spain, Portugal and their colonies markets which afforded a welcome relief to our hard-pressed industries.

We will now confine our survey of events almost entirely to the naval, colonial and economic events which bulk more and more largely in the war. Their trend is shown clearly in the following statistics:—

	THE BRITISH NAVY.		BRITISH MERCHANTMEN.			
	(A). Battleships	(B). Frigates	(C).	(D). In Ger	neral Use.	(E).
Year.	in com- mission.	in com- mission.	Total losses.	The British Isles.	The Colonies.	Captured.
1802 .	104	125		16,825	3,361	
1803 .	32	73	13	17,516	2,825	(missing)
1804 .		95	24	18,247	2,870	387
1805 .	83	107	23	18,438	3,024	507
1806 .	104	111	15	18,761	2,867	519
1807 .	103	126	27	18,845	2,917	559
1808	113	128	28	(miss	ing)	469
1809	113	132	23	19,023	3,066	571
1810	108	132	14	19,377	3,188	619
1811	107	137	20	19,725	3,450	470
1812	102	127	23	_	-	475
1813	102	115	16	-	-	37 r
1814	99	131	14	_	-	145

⁽A) and (B) are taken from the tables in W. James's Naval Hist. of Gt. Britain. (N.B.—The number of small cruisers more than quadrupled that of frigates.)

⁽C) are taken from Sir N. Barnaby's Naval Development in the Nineteenth Century. His total of losses is 240. Troude gives 187 as those of the French Navy.

⁽Ď) are taken from House of Commons Journals for 1808 (App. 42) and for 1810-11.

⁽E) are taken from Capt. C. B. Norman's Corsairs of France. (The numbers are judged to be too high by C. Wright and C. E. Fayle, Hist. of Lloyd's.)

¹ Wellington's evidence in Sir T. Byam Martin, Journals, II, 409.

Notice the sharp drop in the effective force of the Royal Navy during the Peace of Amiens (a clear proof of the pacific aims of the Government up to January, 1803), while there is then only a slight increase in the volume of home seaborne trade and an actual decrease in that of the colonies, doubtless owing to our surrender in April, 1802, of nearly all the enemy colonies taken in the former war. January, 1804, sees our sail-of-the-line more than doubled and an increase in home seaborne trade, which continues in 1805. In 1806 the number of battleships in commission rises to what it had been in 1802, while that of home merchantmen far exceeds it, but colonial shipping lags behind until 1811. Trafalgar, Napoleon's war against commerce necessitates a large increase in British cruisers, under whose protection both home and colonial shipping finally grows, even in the years 1810, 1811, when Napoleon put forth his greatest effort at excluding it from the Continent, and when French, Dutch, and Danish privateers were very active. Obviously, the recapture by 1810 of all the foreign colonies surrendered in 1802 largely conduced to the growth of British trade. Very remarkable is the fact that the wide extensions of his Continental System in and after 1806 failed to stop the steady growth of British shipping. One more proof of its astounding vitality may be found in the average yearly numbers of ships clearing from the port of London in the following decennial periods1:-

1773-83	• •		• •	9,029
1783–93		• •	• •	9,983
1793–1803	• •	• •	• •	11,673
1803-1813				15,211

That London's shipping increased most during the war with Napoleon opens up fascinating vistas of inquiry.—Did the increase of output resulting from our Industrial Revolution (with steam power applied generally to factories after 1800) defy all his efforts at excluding

¹ Commons' Journals, (1816), App. 11.

our goods from Europe? Were our continental customers so resolved to get our cheap manufactures and colonial produce that risks of capture and consequent rise of price did not deter them? Was not our Convoy Act of 1803 increasingly effective in lessening captures on the high seas? Did not our occupation of naval bases like Anholt, Heligoland and some of the Adriatic Islands (added to the possession of the Channel Islands, Gibraltar and Malta), enable us to puncture his Coastal System? And could his 20,000 douaniers ever cope with the efforts of "more than 100,000 smugglers" always ready to run in or pass on the colonial produce which we alone could supply? In fine, was not his attempt to regiment the life of civilised man far harder than ours, to control tropical produce and sell it and our manufactures?

On the surface of things we see the constant triumphs of Napoleon's armies, and then, in the autumn and winter of 1812, an astounding collapse. Never shall we discern the myriad hidden efforts at sea and along his coasts which led up to that disaster. For armyaction is scenic, fleet-action is in general, secret. Yet in the long run his continental conquests were less effective that our continental blockade. Few and far between are glimpses of our naval action around Europe after 1805. Sometimes we erred or failed, as at the Dardanelles and Copenhagen in 1807, against Ganteaume's Ionian Expedition of 1808, or in Gambier's attempt on Rochefort in 1809. History notes and censures these failings, but has not duly explained the causes of our final success, for they have to be dug out from statistics, e.g. that the rates of insurance at Lloyd's for British merchantmen declined from 8 per cent. in 1806 to 5.3 per cent. in 18122. Only one glimpse remains to us of the great convoys that bore in colonial produce, which was now admitted by Napoleon to be all British. Some 1000 British merchantmen were anchored off the

¹ Mollien, Memoires, III, 290.

² Wright and Fayle, Hist. of Lloyd's, pp. 190, 191.

hostile Danish coast in mid-October 1810; they were guarded by H.M.S. Victory (her last commission), bearing the flag of Admiral Lord Saumarez, along with six battleships and six frigates. By chance there passed by a nominally hostile Swedish yacht conveying (by our permission) to Sweden Marshal Bernadotte, lately proclaimed successor to that Crown. He afterwards assured Sir John Ross that "it was the most beautiful and wonderful sight he ever beheld"; and his wonder increased when they set sail for the Kattegat "regardless of the enemies who occupied the adjacent shores."1 The incident probably convinced him of the invincibility of England. Owing to his and our goodwill, the Anglo-Swedish "war" never came to blows, and Swedish shippers continued to prosper from smuggling British produce into Russia, Prussia and Germany. In truth, the imposing Continental System leaked at dozens of points; for European peoples would not go without cane sugar, coffee, cotton, etc., and scoffed at the stuff made from beet, acorns, and coarse Levantine cotton.

Outwardly the Land Power seemed on the verge of triumph by the end of 1810. But, despite all the seizures and burnings of British produce in Germany in the autumn of that year, it continued to filter in from Heligoland. Further, Sweden and Turkey helped on that import trade, to the great advantage of Gothenburg and Salonica. A native of Gothenburg, who returned thither in 1811, was astonished at its growth and prosperity. Likewise Gibraltar and Malta did a brisk trade by running in British produce into South Europe, the values of their imports of our cotton goods alone being £1,983,000 and £2,413,000 in 1813.² Also our hold on Lissa and some of the Ionian Isles helped traders to

¹ Sir J. Ross, Life of Lord de Saumarez, II, 215.

² Commons' Journals (1815), App. 11; J. H. Rose, Napoleonic Studies, pp. 200 ff.; Hecksher, Continental System, pp. 237, 295-323. Malta had so prospered that a firm there, Holland & Co., prophesied its primacy in Mediterranean trade (F.O. 49).

puncture Napoleon's Dalmatian coast, where one firm employed 500 horses in transporting British produce far inland. If all the trade secrets of those wild years were known—but they never will be—we should marvel at the freakish agility of commerce under his would-be stranglehold, and see in it the underlying cause of his overthrow.

Even France felt severely the effects of the commercial war; and in May, 1811, the Emperor sharply rebuked a deputation of merchants, who pressed for relief from the very high prices of raw materials and necessaries of life. He refused, declaring that the English, choked with paper money, must soon be ruined, and he would stop their efforts to cajole Russia. Meanwhile, "France is the richest country in the world." She was ever his first thought. As for his new Dutch, German and Italian dominions, he placed their interests far behind hers, as appears in his letter of 23rd August, 1810, to his stepson, Eugéne, King of Italy. "... If English trade triumphs on the seas, it is because the English are the strongest there. It is therefore reasonable that, as France is the strongest on land, French trade should triumph there. Otherwise all is lost. . . . Italy has to thank France for so much, that she should not object if France acquired some commercial advantages there. Therefore take as your motto: La France avant tout."

This motto was also to regulate the trade of France with Belgians, Dutch, Germans and Swiss under Napoleon's control. They were tributory both in regard to war exactions and commercial relations. Indeed, in the last resort he regarded these new subjects chiefly as providing men, money and war material. Thanks largely to them he expected, in July, 1810, to have ready by the end of 1812 as many as 115 sail-of-the-line for the overthrow of British sea power²—another sign

¹ Miot de Melito, Mems., Chap. 15.

² Nap. Corresp., No. 16,665. See too, Roederer's Journal, pp. 284, 324 for proofs that Napoleon believed the Dutch and Spaniards must always side with France.

of his increasing trust in mass rather than naval efficiency, which his blockaded squadrons could not

possibly attain.

Highly significant also is it that, early in 1812, he examined (only to postpone) a canal scheme for connecting the Baltic with the lower Elbe and thence with the Weser and Rhine, so as to secure Baltic-Dutch-French commerce from the blows of England's sea power.¹ Would not that inland water-way, when connected with the Scheldt-Oise canal, have been more effective than his attempt to dragoon Russian back into the Continental System?

But in him the economist was subordinate to the soldier. Also in the spring of that year he persuaded himself that the Tsar was letting in British produce; that the advance of the Grand Army to the Niemen would bring him to heel; and that a few turns of the Russian fiscal screw would overthrow the tottering islanders. For in the winter and spring of 1811-12 Consols declined, bankruptcies increased, bread rose almost to famine price, the Luddite riots broke out afresh, and hostilities with the United States loomed ahead. Napoleon, scanning our newspapers, formed the conviction that our ruin was certain if Russia would again exclude all British produce. As this conviction lured him on to Moscow, we may here test it by the light of the most important statistics of the British people at this crisis. Unfortunately, they are incomplete, but the following table (p. 235) throws vivid sidelights on those crucial years.

These figures speak for themselves more forcibly than any amount of argument. They are supplemented in Appendix IV by statistics for 1802–12 relating to the yield of taxes and the imports and exports of necessaries of life. The imports of wheat flour in 1811–14 show how precarious would have been our food supply in that year of dearth, 1812, after the outbreak of war with the United States, if our alliances with Russia and

¹ Nap. Corresp., No. 18,454.

Sweden in the summer of that year had not come just in time to open up new sources of supply. Indeed, the *economic* results of Napoleon's rupture with Russia and Sweden in June, 1812, are incalculably great; and in no respect more so than in staving off famine, perhaps also revolution, from the British Isles. The

Real Values of Chief Exports (smaller items are omitted) from Great Britain to the Continent of Europe in £ (omitting ,000):1

		1806.	1807.	1808.	1809.	1810.	1811.	1812.
Cotton Manufacts.		4,467	3,037	2,744	3,910	7,970	7,885	6,304
" Yarn	•••	999	799	654	386	1,066	1,137	466
Flax and Hemp (rough)		3	16	30	7	22	191	296
Iron and Steel		483	446	413	485	538	498	484
Linens	•••	19	23	35	64	237	128	190
Piece Goods of India		1,373	402	374	456	723	737	736
Silk Manufactures	•••	60	64	57	29	69	60	97
Sugar, refined		1,291	1,248	1,099	732	1,445	1,401	122
Sugar, British Plantation		380	236	828	130	76	68	16
Sugar, foreign	•••	265	177	81	194	831	1,019	440
Tea	•••	3	5	2	19	42	15	7
Tobacco		118	97	98	54	127	114	60
Wool, Cotton		17	16	14	3	304	780	22
Woollen Manufactures		3,520	3,100	2,212	1,860	2,500	2,003	2,830
Etc.								
Constant of all Form								

Grand Totals of all Exports

to the Continent ... 27,245 23,770 20,338 18,950 38,530 32,820 24,239

relief afforded by Russian and Swedish wheat in the late summer and autumn of 1812 was of the utmost importance. Probably our position in 1812 would have been highly critical if Napoleon, by attacking both Russia and Sweden, had not made them our natural allies.

To what causes may be ascribe his blunder? Fundamentally, it was due to a conviction that intimidation of those States by vast masses of troops would compel them absolutely to suspend all trade with England. As Chaptal noted, Napoleon's mind more and more underwent a veritable obsession by the colossal;² and

¹ From Commons' Journals (1812), App. 11.

¹ Chaptal, Souvenirs sur Napoleon, p. 271.

this is true not only for outward shows but also in the sphere of policy and strategy. At and after Wagram belief in massed forces marred his campaigns; and similarly, the piling up of his continental mass blurred his vision for the finer issues of diplomacy. Both in war and policy he discarded the rapier for the bludgeon.

Above all he lost sight of man. A decade of brilliant successes had turned the wary and calculating First Consul into the over-confident and overbearing despot. When, early in 1812, his once trusted counsellor, Caulaincourt, warned him frankly of the breach ever widening between Russia and France, he recalled him and sent to Petersburg a wholly dependent clerk.1 -Surely the weak Tsar, who had succumbed to him at Tilsit, would bow before the War-Lord of the Grand Army now moving towards the Niemen. Napoleon also manifested contempt for Sweden and her Prince Royal, Bernadotte. Such conduct was untimely. Baltic fleet certainly encouraged both Russia and Sweden to resist Napoleon's last demands and to frame firm compacts together and with England. Thereafter our warships intervened effectively to prevent the speedy transport of Napoleon's troops and stores by sea to the Lithuanian ports, thus increasing the toil of dragging them over the wretched tracks inland; also a light squadron under Byam Martin helped materially the Russian defence of Riga.² Therefore Petersburg was never in danger. "Je signerai la paix à Moscou"—such was Napoleon's resolve as he pursued the skilfully retreating Russians. But after the unavailing slaughter at Borodino, no pleas for peace reached the conqueror at the Kremlin. Moscow gave her answer by fire.

The death or utter disablement of nearly half a million troops and the exhaustion of French finances were not the only results of Napoleon's Moscow compaign. The sight of the straggling frostbitten bands of survivors of

¹ See Mims. de . . . Caulaincourt (1924).

^{*} Journals of Sir T. Byam Martin, II, 278, 287-92.

the Grand Army struck home; and Prussians and North Germans, long ground down by the Continental System, now rose and wrecked it. Austrians, South Germans, Dutch, and finally most Flemings and Italians, flung off the galling Napoleonic yoke. Thus, Europe, which in the spring of 1812 marched eastwards with Napoleon, in that of 1814 drove him back on Paris. Even France had been so drained of vitality by his System and its consequent wars as to acclaim his abdication. In fact, the verdict of the masses was cast against him, and the Sea Power found itself the leader of an almost united

Europe.

How came this surprising change? Not because of the popularity of England; for the continental peoples had imbibed the belief that she was tyrant of the seas as Napoleon was of the land. But mainly, I suggest, because in June, 1812, she revoked her detested Orders in Council; and the last steps in the completion of her Oceanic System were far less exasperating and wasteful than his attack on Russia and Sweden.—I refer to her capture of Mauritius in 1810 and Java in 1811. These expeditions cannot here be described in detail. So serious had been the depredations of French cruisers from Mauritius on our East India Company's commerce that the first Lord Minto, on arriving at Calcutta as Governor-General in 1807, urged a speedy attack on that island and Ile de Bourbon. His Council strongly opposed it on the score of the extreme need of economy. Never was economy more wasteful. But after three years of severe losses at sea, Minto gained his end; and, thanks to a long blockade of those "French Islands" by our frigates, a great expedition from Madras captured with ease Bourbon in July, and Mauritius in December, 1810.

Meanwhile French and Dutch cruisers were using the port of Batavia in Java as a base for operations against our commerce with the Spice Islands and China. News that a light squadron from Brest was expected in the Far East induced even the unenterprising Council at Calcutta in 1811 to prepare to reduce the last Franco-Dutch stronghold in eastern waters. Again, owing to good frigate work, the expedition achieved complete success, capturing without loss the capital, Batavia, and then, at dawn of 26th August, overpowering the Dutch garrison of 5000 men at an entrenched camp on the hills. Fortunately, the war bills due from the East India Company to the Crown for both expeditions have survived²:—

Expedition to the French Islands ... 3,119,000 ... 3,532,000

The contrast between the expenditure of £6,651,000, in the completion of our Oceanic System, and the colossal waste of life and treasure by Napoleon in perfecting his Continental System at Moscow, yields food for thought. For the Sea Power prefaced fleet attacks by frigate work wearing down the defence before the final blow, which came as a bolt from the blue. Whereas the intimidating advance of Napoleon's Grand Army had long warned the Russians of the coming invasion, and enabled them to prepare both the means and the method of effective defence.

Thus, his resolve to dictate peace at Moscow stretched his Land System (then hard pressed by Wellington) to breaking point, with cataclysmic results. On the other hand, England, for all her clumsiness at the start, steadily gained supremacy at sea, gradually absorbed all tropical trade, and became the one necessary purveyor to all European peoples. Her conciliatory action in June, 1812, offers a signal contrast to Napoleon's plunge into the Russian adventure. In short, she displayed ever-increasing skill, while he courted disaster.

Very searching are the later comments of Napoleon's

¹ After the capture of Sourabaya, Commodore Broughton reported (4th October, 1811) that the French flag no longer flew in the East (Adm., I, 184).

² Commons' Journals (1816), App. 12.

Finance Ministers on the methods of the two combatants. Gaudin concluded that England's final success was due to her "mastery of the seas, which assured to her the profits of the world's commerce, and thereby the means to gain powerful helpers, whose interests were common with hers"; . . . whereas France, "deprived of her colonies, reduced to her internal resources, . . . was condemned to the necessity of being constantly successful in war." Mollien probed even deeper. He criticised Napoleon for seeking to govern the Continent "like a citadel," regulating the primary needs of modern life in a way hopelessly out of date; while England, controlling the raw materials of industry, could undersell French and other rivals by 20 per cent. As for her colonial produce, it defied all efforts at exclusion. In fact, she waged a warfare of modern times, Napoleon "one of ancient times."² Such were the verdicts of his financial experts on the effort "to conquer the sea by land power."

In truth, that idea was essentially Mediterranean. For in maritime affairs he was, and he remained, a scion of that landlocked sea. But, by 1812, the longings of the European peoples turned towards the West and East Indies, whence came the cane sugar and coffee, the fine cotton and silk, which England alone now supplied. Futile, then, was his effort to exclude her produce. Whereas his aims and methods were pelagic and continental, the needs of civilised man had become oceanic and world-wide. Against these imperative demands even the imperious will of the mighty Emperor struggled in vain.

¹ Gaudin, Mems., I, 264, 265.

² Mollien, Mėms., III, 288 ff.

CHAPTER XII

STEAM POWER AND THE SUPPRESSION OF THE SLAVE TRADE

"If all the other crimes which the human race has committed were added together in one vast aggregate they could scarcely equal . . . the amount of guilt which has been incurred by mankind in connection with this diabolical traffic."

(Lord Palmerston.)

In the story of man's relations to the sea there is one side which up to recent times was marked by unrelieved gloom and horror—his use of that element for the enslavement of his brother man. Probably that crime is as old as seafaring; for ancient writers, from Ezekiel to Herodotus, charged Phoenician seamen with kidnapping coast-dwellers for the slave market. Indeed, so lawless was life at sea and on its borders that Thucydides described the early Greeks and their neighbours as leaving the coastline desolate except at some strong natural points, or else fortifying their cities "with walls on the very shores"; while all maritime or coastal intercourse went on under the shadow of fear.

With much the same feelings did the negroes of West and East Africa come to regard the Atlantic and Indian Oceans. For, late in the fifteenth century, there appeared large armed ships whence came parties of white men carrying strange sticks spitting fire. Against them the negro was at a hopeless disadvantage. To the factor of surprise (always on the side of the sea-rover) was now added that of deadly missile weapons; and, when the planters of the New World demanded cheap and sturdy

labour for raising sugar, Africa seemed designed to supply endless stores of slave-workers. Apologists for the Slave Trade long maintained that Providence had fore-ordained the negro for this purpose—a plea which suited, first, so-called explorers, next merchants, and finally rulers and statesmen. For that Trade, especially between West Africa and the Americas, soon became immensely lucrative. Accordingly, by the eighteenth century (the heyday of slaving) commerce was demoralised; and, what with slaving and piracy, the oceans were still the abode of lawlessness and cruelty. Life at the English ports, which then sent forth more than 170 slave-vessels, was also brutalised by the degrading traffic. The first necessary step towards abolishing it was the awakening of the public conscience; but scarcely less important was the creation of the means for assuring the supremacy of law at sea. To set forth the progress of this second stage is here my chief aim; for after the fall of Napoleon the greatest of all maritime issues was the suppression of the Slave Trade, which deeply concerned the extension of law and order over the oceans.

As is well known, the conscience of the English people was aroused, first by the Quakers, then by the Wesleys and other religious leaders, and finally by two graduates of St. John's College, Cambridge, Thomas Clarkson and William Wilberforce, their work being clinched by two other Johnians, Castlereagh and Palmerston. Thanks to the strong philanthropic impulse thus set in motion, Parliament in 1807 abolished the Slave Trade in English vessels; and when some shippers defied the new law, a further Act was passed in 1811, imposing the penalty of transportation (or death in 1824–37); this at once proved effectual. More than 150 British vessels, chiefly at Liverpool, Bristol and London, were put out of action by this reform.

Denmark (to her honour be it said) had already, in 1792, declared for the abolition of the Slave Trade, which was to take effect in 1804. The United States

also, in 1807, prohibited the importation of slaves from Africa (to take effect in 1808); and in the Treaty of Ghent, which ended the Anglo-American War of 1812-14, both Powers agreed to strive for the entire abolition of the traffic in slaves. The wearily long postponement of the hopes thus raised is a disgrace to the nineteenth century. It was due largely to the repugnance of American politicians to the search of suspect slavers which carried their flag. In 1820, Congress passed a law declaring slaving to be piracy and punishable with death. But it speedily became a dead letter; for in that year Judge Story of the Supreme Court declared to a Grand Jury that "the African Trade is still carried on with the implacable ferocity and insatiable rapacity of former times." On 17th December, 1838, the Boston Express published evidence that "out of 177 slave-ships arriving in Cuba, every year, five-sixths are owned and fitted out from ports in the U.S." The infractions of the Act of 1820 increased after 1846, when the slave-holding States threatened to dominate the Union and subject its policy to the demands of King Cotton. More of that in the sequel.

In truth, no great international movement for the uplift of mankind and the rescue of Africa from desolating savagery has ever suffered so sorely from national jealousies. And philanthropists who now mourn the inability of the League of Nations to stop the ruinous race in armaments or the spread of plans for war, should remember that, after the almost international Congress of Vienna (1814), half a century elapsed before civilised States acted together to scotch the Slave Trade. At that Congress the restored Bourbons in France and Spain, while tepidly commending the cause of abolition, yet secretly blocked it; still more so did our other debtors, the House of Braganza in Portugal. Also, on the plea that slaves were not yet freed in our colonies, their politicians and publicists levelled at us taunts of hypocrisy, which were echoed by our West India planters and

cynics at home. Sweden and Holland upheld our action and abolished the Trade, both in their vessels and colonies; but the other Powers long raised difficulties, especially as to the right of British cruisers to search suspect vessels that hoisted their flags.

Yet there was urgent need for concerted action by all civilised powers, for during the Napoleonic War the forces of barbarism had again laid waste a large extent of coast line. Thus, Dr. Erasmus Darwin, in his Levantine tour of 1809-10 found many a shore of the Ægean utterly desolate, the inhabitants having fled to the mountains from fear of enslavement by the Barbary rovers—a recurrence to the state of things pictured by Thucydides. But, when the Congress of Vienna urged the Powers to stamp out piracy in the Mediterranean, England and Holland alone responded, the former sending under Lord Exmouth six sail-of-the-line and fourteen smaller vessels, the latter, four frigates and two sloops, against Algiers. That corsair stronghold, mounting some 1000 guns, defied all overtures; and, on 27th August, 1816, a terrific bombardment ensued, ending with the surrender of the Dey, who forthwith released 1083 Christian slaves, and promised both to give up slave-making and to restore the blackmail wrung from some Italian States. This success, which entailed the loss of 128 British and thirteen Dutch sailors killed, and 690 and 52 wounded, was far from permanent. The Algerines soon slunk back to their old habits, which were not ended until, in August, 1830, France captured Algiers and eventually annexed Algeria. This

¹ Certain modern historians have more or less echoed these charges, e.g. F. J. Klinberg, The Anti-Slavery Movement in England; so too Dr. H. H. S. Aimes in his History of Slavery in Cuba, p. 74 states that in 1815 Great Britain pressed for the abolition of the Trade because she "wished to secure advantages for her own colonies." He forgets that her mercantile marine had lost enormously by abolition, and that both France and Spain at first promised to abolish the Trade, but then wobbled owing to colonial pressure. It was they and Portugal who thereafter procured advantages for their own colonies and merchantmen.

was her main contribution towards the suppression of the Slave Trade.

The chief burden, that of ending the transatlantic Slave Trade, lay on Great Britain, as was natural in view of her naval supremacy. But she also bore the chief financial burdens; for in 1817, when Castlereagh induced Spain to sign a separate treaty, abolishing the Slave Trade in Spanish vessels everywhere after 30th May, 1820, England had to pay £400,000 as compensation for our recent captures of Spanish slave ships. Portugal drove with us an even harder bargain. She and her colony, Brazil, were the chief slave-trafficking States; and in a treaty of 1817 she required the remission of the balance of a loan of £600,000, and the payment besides of a sum of £300,000, for the renunciation of the Trade, though it was to continue for five years south of the equator.2 As for France, she in 1819 agreed to abolish the Slave Trade in her vessels, but opposed the right of search of suspect vessels if they carried the French flag. After the Revolution of July, 1830, the new King, Louis Philippe, conceded that necessary right (on mutual conditions), but only for ten years (1871-41). Brazil was the last to agree to abolish the Trade, but though she did so in 1827, by a treaty which was to take effect in 1831, this soon proved to be a dead letter. All this conniving at the Trade naturally led Atlantic pirates to take it up as safer and more profitable than "the profession of the sea."

After the jealous huckstering of the twenties, the next decade showed some progress, especially on the part of France. But Spain and Portugal and their colonies³ were half-hearted in suppressing the Trade, while their shippers were whole-hearted in continuing it.

¹ Yet Dr. Aimes admits (pp. 83, 95) that, in 1818-20, as many as 95,817 negroes were imported into Havanna, a sign that the Cubans hastened their imports enormously just before abolition.

C. K. Webster, Castlereagh, p. 456.

² Except those of Spain in South America, which, on achieving independence after 1821, declared for abolition.

Great Britain alone sent an adequate force to observe the coasts and harbours which exported and imported slaves; and its efforts at capturing slavers were greatly hampered by the objections of the Latin Powers and the United States to the right of search. According to their views no slaver could be searched unless there were clear signs that she had slaves on board. preparedness for slaving did not suffice, though the presence of supplies of timber below ready for constructing one or more "slave decks," and of numerous casks of fresh water and "slave-food" ready for the Atlantic voyage constituted infallible proofs of guilt. But, of course, these and other concealed signs needed a thorough search of the ship; and there came the hitch, for, as has been shown, the right of search was jealously restricted. Even so, however, some resolute British officers succeeded in making many captures off the West African coast. In 1829 a small but swift cruiser, the Black Joke, succeeded in taking twenty-one slave ships carrying some 7000 slaves.² Most of these were landed in Sierra Leone, on which lay the heavy burden of caring for most of the liberated slaves.

The important part played by this colony during the long struggle has not received due attention. Situated on the flank of the main sea routes between West Africa and the Americas, it occupied a dominating position, the value of which was enhanced by good natural harbours. Freetown, once the haunt of slavers and pirates, became a British settlement, and now formed the chief base of our squadrons watching the slave coasts. Though hampered by a trying climate, the little colony struggled on and grappled with the problem of absorbing every year hosts of liberated slaves, speaking over a hundred different dialects and exasperated or deadened by the privations usual on tightly packed slave ships.

¹ See H. G. Soulsby, The Right of Search and the Slave Trade (Baltimore, 1933), pp. 11 ff.

² L. Clowes, Hist. of the R. Navy, VI, 269.

Despite endless difficulties arising from the cloaked hostility of Spanish and Portuguese officials near by, British cruisers off West Africa kept down the Trade, capturing from July, 1836, to July, 1837, as many as twenty slave vessels carrying 7143 slaves. The Anglo-Portuguese Commission sitting at Freetown set free the survivors; but as many as 719 died soon after rescue by our cruisers. The yearly sale of about a score of captured slavers gradually developed a trading sense among the liberated negroes, so that a few of them who worked hard and looked ahead, actually became rich enough to buy some of those filthy hulls and fit them out for lawful trade at Freetown or Sherboro! Had it not been for Sierra Leone, those hulls would again have been packed with slaves. Liberated slaves also provided good recruits for the new West African regiments; for their mortality averaged only 3 per cent. as against 50 or 60 per cent. for white troops.² Thus, though Sierra Leone was long dubbed "the white man's grave," it ought to be known as "the black man's hope.

The career of one of the thousands of liberated slaves will illustrate the influences which thence flowed forth A Yoruba boy, afterwards called Samuel Crowther, was in 1821 seized by native slave raiders, sold to Portuguese dealers on the Slave Coast and shipped for the New World. Rescued speedily by H.M.S. Myrmidon, he and his fellow sufferers were landed at Freetown, where he was trained in a missionary school, soon became a teacher-missionary and accompanied the ill-fated Niger expedition of 1841. Proceeding later to England, he received further training in the Church Missionary College and was ordained by Bishop Blomfield in 1843. On his return to Africa he laboured many years among the Yoruba where he found his mother. There he translated the Bible, wrote school books and started the growth of cotton. In 1862 he

¹ F.O.84-No. 214.

³ Commons' Committee, Report on Slave Trade (May, 1849), p. 156.

became Bishop of the Niger territories, and toiled there unceasingly until stricken by paralysis in 1891. Thus ended an incalculably useful career. Rescued from a horrible death or long slavery in the New World, he helped to start West Africa on her new life of freedom, and also proved the ability of the negro to raise his own people.¹

Well was it that Sierra Leone lay near the track of slavers sailing towards the New World, for over there real liberation was difficult. After making half-hearted efforts to carry out abolition of slavery and slave-trading as ordered in 1820, the Cubans had relapsed into the old customs. These have been condoned as natural;2 and certainly it was difficult to stop the illegal imports of slaves along a serrated coast line of 2000 miles; so the Spanish law forbidding them was evaded. Thus, when in 1829 a British schooner, H.M.S. Pickle captured a Spanish slaver, Boladora, of double her size, she was maltreated at the nearest Cuban harbour; and, on getting her prize finally to Havanna and procuring her condemnation by the Joint Commission there, the liberated negroes were by law handed over to the local Governor as "indentured servants"—a status no better than slavery.8 Nevertheless, as the Cuban Slave Trade continued unabated, British cruisers in those waters landed liberated slaves in our West Indies; for 981 were landed there in 1843-56.4

Brazilians also demanded large and regular shipments of slaves to work their rapidly growing sugar or coffee plantations; and those extensive coasts, fringed largely by forests, facilitated such imports. Also in 1827 when Brazil (now independent of Portugal) abolished the Slave Trade, it was merely transferred to Portuguese

¹ See R. Wardlaw Thompson and A. N. Johnson, Brit. Foreign Missions, pp. 84, 158, 212.

² Aimes, Slavery in Cuba, Chap. 4.

^{*} See Nautical Mag. for 1834, pp. 649-54.

^{*} Parl. Accounts and Papers (1862), (West Indies, p. 5).

ships; and these practically "covered the whole Brazilian Slave Trade of 90,000 slaves per annum." Again, when by the treaty of 1835 Spain abolished her Slave Trade and conceded to us the right to seize her vessels "equipped" for the Slave Trade, these forthwith adopted the Portuguese flag, which remained immune for seven more years.1

Owing to these tricks and the enormous profits made on selling negroes to cotton and sugar planters in the New World, the Trade continued to increase. In 1837 the great successor of Wilberforce, Sir Thomas Fowell Buxton, after careful examination of statistics, reckoned that some 150,000 Africans were annually imported into Brazil, probably as many into Cuba, and smaller but still considerable numbers into Buenos Ayres and Porto Rico, besides 15,000 into Texas. These figures seem exaggerated, but the Trade had probably almost doubled since Clarkson and Wilberforce began their "To end it will require the whole energy of Great Britain"—such was Buxton's conclusion. urged merchants to try to supplant the Slave Trade by lawful commerce in the many products which Africa could supply; and for this purpose he and James M'Queen founded the African Civilisation Society, which in 1841 sent out steamers to explore the Lower Niger. natives appeared eager to trade and to be rescued from slave raiders, but malaria ruined this effort.2

It also aroused the jealousy of the United States, then at sharp variance with us on the Oregon and Maine boundary disputes. The Anglophobe Government at Washington insinuated that England's aim in suppressing the Slave Trade was the furtherance of her own commerce. Yet, obviously, honest trafficking with African chiefs was

¹ For these and other devices of slavers, see Dr. W. Mathieson's Gt. Britain and the Slave Trade, pp. 12-27.

Buxton, Sir T. F., The African Slave Trade and its Remedy (1837), p. XIV, pp. 2-25; and Memoirs, ch. 28. The first small steam boats used for exploring rivers were on the Congo in 1815. But that effort failed. (Clowes, Royal Navy, VI, 183).



CAPTURE OF SLAVER "BORBOLETA" BY BOATS OF H MS "PANTALOON"

free to all nations and it alone could end slaving. Nevertheless, in 1841, that Government induced the French not to join in a proposed treaty between them, Great Britain, Austria, Prussia and Russia, for banning the Slave Trade as piracy and for granting mutual rights of search of all suspect vessels. Further, the small American squadron it despatched to West African coasts captured only one slaver in ten years, though it watched closely movements of our cruisers and searched three British merchantmen between July, 1846, and January, 1847.

When honest folk fall out, rogues prosper; and their tricks at sea surpass those on land. Indeed, the devices of slavers fill scores of volumes of despatches in the British Foreign Office. Only a very few can be noted here.—A merchantman, secretly carrying timber for a slave-deck and hundreds of casks for water or "slavefood" (often taken aboard in the Cape Verd Islands), arrives off West Africa, chooses a place for landing the supercargo and armed men to raid villages, or else buy slaves from a chief and then stow them in a barracoon (depot). Meanwhile the slaver builds her slave-deck from stem to stern, and sails off to procure more water and food, returning, when the coast is signalled clear, to take in her human cargo and then make off betimes. Or again, five or six slavers muster at some rendezvous, send off one vessel (empty) to act as picket or decoy-duck if a British cruiser heaves in sight, while the others bargain and seize or buy negroes and provisions. When advised by the picket or by the slave-dealers ashore, they haste to pack in the negroes, water and rice, and sail away before the cruiser is upon them. At most, it captures only one slaver. Or again, a slaving captain will throw overboard all his slaves, the slave-deck, handcuffs, etc., so that the tribunal cannot confiscate his ship as having slaves on board. Another device is to entice our ships' boats into lagoons stretching behind

¹ Soulsby, pp. 50-63, 73-75, 123-29. I hope to treat this side of the subject more fully in an article in the *Mariner's Mirror*, Vol. XXII.

the coast line where canoes filled with slaves are shown as if prepared for export. Retreating inland behind treacherous sandbanks or a dense screen of mangroves, the slave-dealers try to ground or ambush the boats. Our sailors detested no part of their work so much as these harrassing chases inland, which in any case left them exhausted and therefore a ready prey to fever. Indeed, only when steam launches entered the arena was the inshore and lagoon game between black and white at all equal. For native canoe men knew the best passages and the dodges for running through the mountainous surf, often fatal to strangers.

The dice were also heavily loaded against our men by corrupt local Portuguese or Spanish officials. badly and late from Lisbon or Madrid, they were mostly tempted to connive at the Trade by warning slavers of the movements or plans of our cruisers. To take one example among many:—Captain E. H. Butterfield, R.N., finally found out that, when a certain Portuguese governor left the coast for a holiday inland, local slaveowners regularly filled their vessels and escaped. Butterfield, therefore, had the movements of the governor closely watched, ran inshore soon after the official holiday began and "never failed." Captain Sir Henry Huntley, after long service off West Africa, declared that most of the Portuguese officials connived at the Trade, one of them openly helping a slave schooner to escape, and sneering at Portugal's recent abolitionist legislation as a new fashion that soon would pass.8 Later, Huntley declared his conviction that England's efforts to stop the Trade were hopeless. Certainly, as the accompanying plate shows, the difficulties were immense, especially in the days of sails, for H.M.S. Pantaloon, when chasing a large pirate-slaver Borboleta, was becalmed, and had

¹ Dr. J. Macmillan Brown (*The Dutch East Indies*, p. 7) proved that steam launches there hunted down pirates in their river haunts.

² F.O. 84-No. 617.

Sir H. Huntley, Seven Years' Service on the Slave Coast, I, 25, 265-71.

to send on boats to capture her. In spite of unequal conditions, the boats finally succeeded, but lost two killed and six wounded.¹

As to the best method of blockading or observing this vast extent of coast our officers were long in doubt. So late as May, 1849, Commodore Sir Charles Hotham defended the Nelsonic policy of distant observation. To the Parliamentary Committee of Inquiry he stated that the lagoon, stretching some 1500 miles continuously east of Cape St. Paul, prevented an effective inshore blockade; for the slaves were quickly paddled along it to points that were not watched. But he greatly exaggerated the extent of the lagoon and the difficulties of a close blockade, which was convincingly championed by Captain the Hon. Joseph Denman, R.N., and other experienced officers. Two French captains had already supported the latter view, adding that their small squadron of rather slow cruisers was best fitted for inshore work at the most important points, signalling to the faster English craft a little farther out.

Official reports stated that our efforts between Cape Coast Castle and the Niger Delta had, by 1849, greatly lessened the Trade in that area; but others affirmed that the slave traders rooted out from the Slave Coast transferred their energies to the Congo district, where the natives were found to be "the best tempered and most manageable." In December, 1848, Hotham had reported the numbers and boldness of the raiders and dealers in that great river, where they had factories and forts. He stated that "a full slaver came down the Congo and ran boldly past H.M. Steamer Pluto, lying at its mouth, in the certainty of escape." Apparently, it did escape. Indeed, Hotham despaired of extinguishing the Trade, because, despite our utmost efforts, it seemed to increase. In 1845 we had thirty-six cruisers

¹ Naut. Mag., 1845, pp. 611 ff.

² Commons' Committee, Report on Slave Trade (May, 1849), pp. 142-44-² F.O.84—No. 617. So too Capt. J. Denman in The African Squadron.

in the "Preventive Squadrons," actually working off Africa, Brazil and Cuba; yet dozens of slavers still slipped into the harbours of the two last, which had formerly prohibited the Trade; and in Africa, as he pointed out, if suppressed in one place it always cropped up in another. On the other hand, G. Brand, British Consul in Angola, announced that, even in that southern region, our cruisers had almost ruined the slave-traders.1 Equally opposed were statements about the health of the African Squadron. Hotham reported gloomily on it as suffering a rapid decline and demanding constant reliefs, but in March, 1849, Commander Riley contradicted this to the Commons' Committee and reported steady improvement, though formerly "they used to send home hundreds." The luck of different cruisers varied greatly. Commander F. Montresor, R.N., stationed off Benguela, said that he made few captures, while near by, off Ambriz, H.M.S. Styx took about thirty vessels. Yet he advised the forming of a cordon of "not less than twelve steam cruisers and from twelve to eighteen small steam boats."2 Amidst these conflicting statements opinion in England became confused, and in those "hungry forties" tended towards despondency and cynicism. Could England (men asked) afford to spend large sums on a quest, seemingly endless and fruitless, in which the Latin nations still wobbled, while the United States screened all shippers who flew the stars and stripes? Indeed, would that lucrative traffic ever cease while the area under cotton and sugar steadily grew? And could our squadron effectively observe, still less blockade, the 4000 miles of coast from the Senegal to Benguela?

Moreover the difficulty of suppressing the Slave Trade was singularly increased by the progress of political ideas and of democratic legislation in England. Since the abolition of slavery in British Colonies by the Act of

¹ Commons' Committee, Report on Slave Trade (May, 1849), pp. 144-150.

² Ibid., pp. 27-29.

1833 (which accorded £20,000,000 in compensation to their slave-owners) we had imposed lower customs' dues on their "free-grown" sugar than on the "slavegrown" sugar of the Southern States, Cuba, Brazil, etc. But the triumph of Free Trade in England and the desire to cheapen sugar to our consumers, now led Sir Robert Peel and Lord John Russell to approximate the duties on "slave grown" sugar to those on the "free grown" product of our colonies.1 These resented the change as much as Cuban and Brazilian planters welcomed it, the price of sugar rising 15 per cent. in a single month in Cuba, while the number of slaves imported rose sevenfold from 1846 to 1849.2 A similar change took place in Brazil and the South of the United States. the increase in the number of slavers then captured by our cruisers was due largely to the fiscal changes decreed at Westminster, which, while benefiting the home consumer, also for a time enriched slave-owners and slave-dealers. Further, the accession of new States, Texas and New Mexico, to the Union strengthened the champions of slavery, who acclaimed it as a "divine institution" and lynched its critics. Lancashire also demanded more and more cotton. What wonder, then, that out-and-out Free Traders cried out: "Hands off" even from "trade in man?"—"Laisser faire holds good in all spheres. Leave the Slave Trade alone, and it will choke itself." Such were the cries of extremists, and for a time they affected even Cobden, Bright and Gladstone.3 These statesmen declaimed against the use of armed force even to put down an evil; for did not the chasing of slavers compel their owners to pack in the human cargo more tightly and lead to far greater cruelties aboard?

Here we touch on a much debated question. Of

¹ Dr. J. H. Clapham, The Railway Age, pp. 498-500.

Aimes, Slavery in Cuba, pp. 160, 269.

^{*} For their attitude see W. Mathieson, Great Britain and the Slave Trade, pp. 104, 108-13, 191.

course on a Trade which varied according to the characters of owners and captains, no wholesale sweeping verdict is rational. Certainly the tendency in the forties was for slave dealers to buy "sharp Baltimore clippers" because they were built of light American wood and on fine lines so as to outpace even the best English frigates; and fine lines involved closer packing of the human cargo. Yet there is good evidence that long before the forties, slaves were closely and brutally packed. One testimony from West Africa must suffice here. Mr. J. Rendall, British Consul at S. Antonio, Cape Verd, expressed to Lord Palmerston his deep regret at the "agitation" in England for withdrawing our African squadron on the grounds just stated; because in the first years when we could search and capture Spanish slavers (i.e. after 1835), he saw some of the prizes early brought in to Sierra Leone, and found in them the same miseries due to overcrowding, filth and stench as existed to-day. Indeed, the withdrawal of our squadron, far from lessening those miseries, would multiply them, "because in such a case one hundred slaves would then be shipped off where only one now is."-Let us (he concluded) continue our efforts, which are both lessening that Trade and turning the natives of Africa towards tillage and lawful trade.1 Evidence like this, together with the powerful support of Lord Denman, who declared the suppression of the Slave Trade to be the most important object ever presented to the mind of man, strengthened Palmerston's resolution to persevere. And he struggled on in spite of theorists and cynics.2

Equally staunch was Jack Tar. Weary work was that long blockade, often rolling to and fro near the outer rim of mountainous surf, or, worse still, toiling in

¹ Commons' Committee, Report on Slave Trade (May, 1849), p. 151.

² See T. Carlyle in *Fraser's Magazine* (Dec., 1849), and *Latter Day Pamphlets*, No. 2. Pamphlets supporting Palmerston's policy are by Lord Denman, Capt. J. Denman, R.N., Commr. H. J. Matson, R.N., Lieut. H. Yule, J. Richardson, Rev. W. Brodie, etc.

boats along pestiferous lagoons; but our sailors' songs ring with the zeal aroused by the sight of a slaver. These two verses culled from one of them must suffice!:—

"Set every stitch of canvas to woo the freshening wind,
Our bowsprit points to Cuba, the coast lies far behind.
Filled to the hatches full, my boys, across the seas we go,
There's twice five hundred niggers in the stifling hold below.

—Asail! What say you boys? Well—let him give us chase.
A British man-of-war, you say? Well—let him try the race."

"Hoarse was the slaving captain's voice, and deep the oath he swore, 'Haul down the flag: that shot's enough: we don't want any more.' Alongside dashed the cruiser's boat to board and seize the prize. Hark to that rattling British cheer that's ringing to the skies; Up, up with the negroes speedily; up, up, and give them breath, Clear out the hold from stem to stern; that noisome den is death; And run aloft St. George's Cross, all wanton let it wave, The token proud that under it there never treads a slave.'"

In truth, there was no need for despondency, even amidst the disappointments of the forties. The official returns presented to the House of Commons on 26th February, 1850, showed that, despite a drop in and after 1841, owing to the withdrawal of cruisers for the China War, our West African squadron had in 1840-8 captured 625 slavers, thus liberating 38,033 negroes. The captures rose from 44 vessels in 1843 to 91 in 1848. Also in 1849 there arrived off West Africa a bold and enlightened American officer, Lieut. A. H. Foote, who in his brig, *Perry*, worked hard against the American slavers and captured two of them, but at some risk to his own advancement.²

And now, in this time of doubt and despondency, the cause of civilisation was to be helped by the advent of a mighty power, which for the first time endowed man with real mastery at sea; for the forties, which bred political scarlet fever, also produced the curative screw

¹ C. H. Firth, Naval Songs and Ballads (Navy Records Soc.), p. 235. ² A. H. Foote, The African Squadron (1855); Spears, J. R., Hist. of the U.S. Navy, III, 363-67.

steamer. When used in an iron hull, as it speedily was, the screw and the frame were capable of enormous expansion, and could defy storms that shattered paddles and paddle-boxes. Consequently, in 1850 the shipbuilder, Mc'Gregor Laird, declared that no private firm would thenceforth build a wooden steamer; and a year later a naval officer stated that there was nothing like the screw for forcing a passage through ice.1

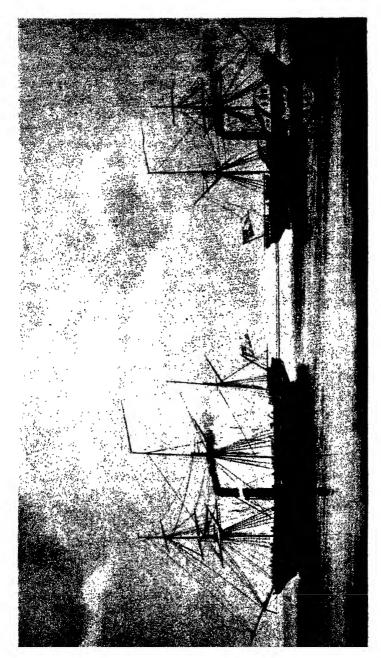
Only the salient facts in the triumph of the screw over the paddle need be noticed here. John Ericsson, the first successful adapter of the screw to marine propulsion, after failing in 1836 to convince the British Admiralty that a screw steamer could steer well, turned to the United States Navy Board, which gave him a cordial welcome. Consequently, in 1843 the first screw warship, Princeton, was launched; she carried telescopic funnels and therefore could disguise herself as a sailer.2 Fortunately, our far-seeing engineer, Brunel, favoured Ericsson's invention, and in 1842-43, changed his new steamer, Great Britain, then building at Bristol, from paddles to a screw propeller. Her success induced the Admiralty in 1845 to experiment in the Solent with a screw steamer, Rattler, and a paddler, Alecto, of very nearly the same tonnage and horse power. The Rattler easily won the races, and finally in a tug of war, towed the spluttering paddler backwards at 21 miles an hour.8 These tests decided the day in favour of the screw; and in that year the Admiralty ordered more than twenty steamers to be fitted with screws4; but few screw sloops or frigates appeared off West Africa until 1850, when we possessed thirty-one screw steamers.

Already, however, naval officers were convinced of their effectiveness in catching slave vessels, then almost

¹ The Nautical Magazine (1850), p. 337; (1851), p. 92.

^{*} Spears, IV, 10-12.

³ Nautical Magazine (1845), pp. 331 ff. But in this tug-of-war, the Rattler developed higher horse-power. She was 92 tons heavier. So the result was not quite conclusive in favour of the screw. General experience, however, was. Sir N. Barnaby, Naval Development, pp. 111-13.



H.M.S. "RATTIER" versus H.M.S. "ALECTO," 1845.

all sailers. Even at the Joint Commission held in 1845 a French witness, Capitaine Bouet-Willaumez, stated that, if France and the United States were efficiently to supervise even their own merchantmen off West Africa, they must each have twenty good cruisers (ten steamers and ten sailing ships).1 Also Commodore W. Jones, commanding our new steam-frigate, Penelope, the flagship off West Africa, reported in March, 1846, her successes in capturing slavers, including the big United States (nominally Brazilian) steamer Cacique, when about to complete her cargo of 1500 slaves. He warned the Admiralty of the danger ahead if fast United States steamers were used for the Trade; they could, obviously, be captured only by faster steam-frigates. This advice, apparently, was acted on and with good results; for from off Sierra Leone the prevalent westerly wind blowing into the Bight of Guinea and the constant easterly current told heavily against slavers making for the New World. Accordingly, steamers nowhere had greater advantages than along those coasts, especially as they could coal at Freetown or Sherboro', and after 1851 at Lagos. On the other hand, slaving steamers had very great difficulty in getting in coal on the African coasts. Even our steam cruisers, which could coal at our depots in Sierra Leone or at Fernando Po, took three or four days at a time; so we ought always to catch a slaver while coaling where there were no facilities.2 In truth, in the age of steam then dawning, victory must crown the efforts of efficient steamers having good coaling stations near by. Also, as the slaver needed secrecy, she was heavily handicapped in having to repair to definite coaling-places.

Off the Congo and Angola coasts we had fewer advantages; but on the track towards South America we

¹ F.O. 84—No. 617.

² Commons' Committee's Report (May, 1849), pp. 17, 18. In 1851 a speculator opened a coal depot at St. Vincent, one of the Cape Verd Is.; but of course our cruisers could coal there, and watch any suspicious craft.

possessed Ascension Island, which provided a station for our colliers, and also furnished fresh provisions, and a sanatorium for the fever-stricken. Indeed the island played so useful a part in our struggle with the slavers from the Congo area to Brazil and La Plata that Captain Sir Henry Taylor prophesied its ruin if ever the Slave Trade ceased, which he deemed impossible. In this chapter I cannot discuss the East African Slave Trade; but obviously Cape Town and other ports as far as Durban were highly useful as bases for our cruisers putting down the then growing Slave Trade from Mozambique, Zanzibar, etc., to the Americas.

In May, 1850, the Admiralty issued a Questionnaire to twenty-six officers experienced in the suppression of the Slave Trade. We need notice here only their judgment about steamers. These are commended in most answers as far the best for blockade. Also for coastal cruising some officers suggest that the telescope funnels be kept lowered so as to give the appearance of sailing craft. Of course this suggestion could apply only to screw steamers, for the paddle boxes would betray the others. Here, then, was another advantage of the screw steamer, that it could act as a "mystery ship." Further, in the House of Lords' Committee on the Slave Trade (1850), Mr. Gladstone, who, like Cobden and Bright, opposed suppression of the Slave Trade by force, was countered by John Hay, a Lord of the Admiralty, declaring his conviction that slaving could, and would, be put down largely by the help of the small swift screw steamers now building in our dockyards.2 The naval man was right, the doctrinaire landsman wrong. Other witnesses proved that the Trade was now declining north of the equator, except at Lagos and in the harbours of that arch-trickster, the King of Dahomey.3

¹ See further evidence in Nautical Mag., Vols. XIX, p. 337; XX, 92, 212; XXII, 358.

Lords' Committee's Report (1850).

See evidence in Nautical Mag. (1852), p. 431.

In 1851, the aggressions of the native King of Lagos (a slave-dealer) brought about hostilities, in which two British steamers and a flotilla of boats forced that difficult entrance and after one failure, captured that important slaving centre, which then mounted fifty-two cannon.1 As the kinglet whom we restored and supported could not cope with the powerful slaver-gang, Lagos was annexed in 1861, and became a useful base for stamping out the Trade in the Bight of Guinea and the Niger delta. Indeed, apart from Dahomey, which exported about 8000 slaves a year (at a profit of \$300,000 to the king), the Trade was now almost extinct north of the equator; and natives more and more took to honest trade, especially in palm-oil,2 the exports of which to England rapidly increased. Even in the Congo region the Slave Trade declined, and probably would have died out but for a sharp revival of the demand for slaves due to the cholera epidemics in Brazilian and other plantations, and to the demands from parts of the United States. For the friction with that Power, also with France in the late fifties, readers may consult the works of Dr. H. G. Soulsby and Dr. W. L. Mathieson.

Indeed the process of "Americanisation" of the Slave Trade, as Dr. Mathieson terms it, might have led to hostilities with us but for the tactful restraint practised by our naval officers in dealing with slavers that flew the stars and stripes, as nine out of ten now did. American-built steamers also had entered into the Trade; but, as was stated above, steamers were less profitable than swift sailing ships; for in these the whole space from stem to stern was available for the slave deck or decks, and there were no fires and boilers to add to the death roll of the slaves during the voyage. So, small men stuck to sailers and trusted to get them through by trickery. But undoubtedly, the suppression of the Trade entered on a highly dangerous phase when it was

¹ Clowes, VI, 367-71.

² Commodore Burgess of H.M.S. Hecate in F.O. 84-No. 1040.

"Americanised." So, what with hindrances from Paris and Washington, and the withdrawal of several of our cruisers for the Russian War and the Indian Mutiny, the fifties showed few signs of the speedy end even of West African slaving.

But in the spring of 1860 there came a mighty change in North America. The high handed conduct of the slave-owning Southern States brought about a sharp reaction, which carried their stern opponent, Abraham Lincoln, to the Presidency at Washington. Forthwith the American squadrons off Africa and Cuba actively hunted down their slave vessels, capturing in all twentythree in one year-a great advance on the slow work of the forties.¹ The outbreak of the American Civil War necessitated the recall of those squadrons to blockade the Confederate harbours; but by the treaty of 7th April, 1862, the Washington Government granted under certain conditions permission to our cruisers to search suspect American vessels. The conditions, however, still hampered the work of search; and, when sharp friction arose with the United States concerning blockaderunning and other maritime incidents, our officers were loth to board any ship flying the American flag. Their prudent restraint is worthy of all praise; for incidents like those of the Trent and the Alabama brought war within sight. Yet war between two sister nations, both now working hard to suppress slavery and the Slave Trade, would have been monstrous; and the common sense of the masses and most of their leaders kept the sabre-rattlers in check. Did not Lincoln in February, 1862, hang a former slave-raider, Gordon (the first to be hanged under the statute of 1820), and in September declare for the liberation of all slaves? Compared with these mighty changes in American policy, maritime incidents were of merely passing importance. The Washington Government, however, did not until August 1865 (i.e. four months after the end of the Civil War)

¹ Soulsby, pp. 50, 73, 136 ff.

prepare to send back its squadron to African waters, and not until 1866 did two cruisers reach Loanda.1

Consequently, on the British squadrons off those coasts fell almost the entire burden of stamping out that Trade. They did so effectively. The annual report of the Mixed Courts of Sierra Leone in 1865 stated that no case of capture had come before them in that year, but since 1819 as many as 56,935 slaves had been landed and liberated in that colony.2 In 1865, Commodore Wilmot, R.N., reported the African Trade as almost extinct: "England can extinguish the Slave Trade by her own unaided efforts . . . and after all the sacrifices that have been made, it will never do to abandon As has already been stated, no American cruiser came back to African waters until 1866; but at last Spain and Portugal were helping us, also France at times. This, then, was practically the end of slaving in the Atlantic Ocean. To this day it has gone on in East Africa, especially across the Red Sea, where conditions favour the survival of that peculiarly Arab Trade.

Reviewing this subject, we may on the whole conclude that nothing but stern and incessant naval action could have put down that inhuman traffic within the nineteenth century. Doctrinaire Free Traders, who in its middle decade pleaded that the Trade if left to itself would commit suicide, forgot that in the Americas and the West Indies enormous areas still awaited development for sugar and coffee plantations, which called for increasing supplies of sturdy labour. Moreover, the free import of vast hordes of Africans had led planters into careless exploitation of their slave labour and disregard

¹ G. Welles, Lincoln and Seward, pp. 155 ff.; and Commons' Committee's Report (1867), p. 64. Probably Lincoln's influence changed Seward's anti-British attitude of 1860-61 into one of comparative moderation, when slavery was seen to be the great issue. See Prof. R. G. Trotter's article on Anglo-American Relations in Canadian Hist. Rev., March, 1935.

^{*} F.O. 84—No. 1275.

^{*} Report to Parliament in 1865, p. 158.

of the lives of children. The efforts of our own and other cruisers soon raised the value of slaves in the Americas, and compelled even the worst planters to lessen the appalling infant mortality. Occasionally a brutal slaving captain, when chased, would throw slaves and slave-deck overboard, to destroy proofs of his guilt; but this was unavoidable in the long struggle between land-made law and sea-bred villainies. Not until the swift screw steamer entered the arena did the cause of civilisation and humanity prevail; and by a happy coincidence the American Civil War came to clinch the triumph. Many Southerners, it is true, desired to abolish slavery; but would they, in case of success, have induced the sugar and cotton interests to do so? The victory of the North decided that great issue; and its repercussions were seen in the (nominal) abolition of slavery by Brazil in 1870 (not really accomplished until 1888), by Cape Verd Islands in 1876, and Cuba in 1886. The cessation of the demand for slaves wholly stopped the African supply. But that inhuman traffic had been almost cut off by the ceaseless efforts of British

That the ending of that "trade in man" has, in the long run, ministered to the welfare of the many millions of Africans now in the New World is indubitable; for they are now among the cheeriest of its inhabitants. To cite but one verdict—the historian, James Antony Froude, after visiting the British West Indies, stated in 1887 that "the earth does not contain any peasantry so well off, so well cared for, so happy, so sleek and contented as the sons and daughters of the emancipated slaves in the English West Indian Islands." And, on the whole, the same could be said of their brethren in North and South America.

Finally, if we regard our subject as dealing with the last phase of an inhuman custom dating from prehistoric

¹ Froude, J. A., The English in the West Indies, p. 78.

ages, we may declare the suppression of the Trans-Atlantic Slave Trade to be among the most beneficent events of all time; for it cleansed the Americas and also enabled Africa to enter on a career of progress never before known in her sad history. It accomplished even more; for the reign of law was now at last extended over an element which had ever defied it. Scientific inventions, such as the submarine telegraph and wireless telegraphy have come in opportunely to clinch human control over watery wastes that were the domain of pirates and slavers. Accordingly, the element which once aroused the fears and hatreds of mankind now bids fair to be the surest means of union and friendship. Philosophers and theorists may dispute whether on land progress is a reality. Those who study man's relations to the sea need harbour no doubts.

APPENDICES

APPENDIX I

Critics of the Phoenician Circumnavigation (see Chapter II)

I PASS over some ancient writers (e.g. Ephorus, Fragment 96A, and Polybius, III, 38) who, without assigning any reasons, discredited the Phoenician exploit. In modern times the first important commentator is Major James Rennell, whose survey work and wide travels add weight to his arguments in favour of the story. For the first time he examined details of navigation, especially of winds and currents, and showed them to be decidedly favourable to the effort. He however erred (I think) in placing the probable departure of the Phoenicians as early as July, when the heats of the Red Sea were at their fiercest, and their arrival at the southern tropic as early as the end of January. He also pushed them on at this rate in order to give them favouring winds and currents as far as the Cape of Good Hope—a piece of highly theoretical voyaging. For the Atlantic his timing is equally fast, viz. only four and a half months from Sofala on the east coast to Benguela on the west. There they make "their first long halt . . . this being a fruitful country." This passage disproves the charge of Mr. E. J. Webb in Eng. Hist. Rev. for January, 1907, that Rennell assigned only one harvest to this voyage.

Rennell assigns to the Senegal the second harvesting. He then allows five months thence to the Nile, so that they would end the voyage within two years. He notes that Herodotus allows two years up to the end of the second harvesting, and, rather lamely, tries to square his own hypothetical voyaging with the slower progress in the *History*. The latter seems far more reasonable, as allowing for accidental delays.

J. T. Wheeler (*The Geography of Herodotus*, pp. 338-42) reconstructs the Phoenician voyage by sending them off from Suez in August 613 B.c., to double the Cape of Good Hope in April, 612. They would reach St. Thomas's Island in July, and the Senegal in March, 611 B.c., and reach Egypt five months later. He allots their harvestings to Angola (!) and the Senegal. More valuable is his proof of the fine equipment and organisation on Phoenician ships, and the length of voyages already undertaken. He therefore believes in the circumnavigation.

¹ Rennell, J., Geographl. System of Herodotus (1800), Chaps. 24, 25.

Sir Ed. H. Bunbury in his History of Ancient Geography (1879) urges against it the immense length of the voyage, the difficulty of carrying provisions, the absence of any gold discoveries, the extreme brevity of the account (with no notice of the change of seasons), and the likelihood that both Egyptian priests and voyagers to the end of the Red Sea knew that the sun there was vertical at the summer solstice, and therefore, further south, would appear in the northern sky—a phenomenon which might be tacked on to a concocted story of circumnavigation. argument implies that voyagers to those southern regions would have made known the solar phenomenon, and that Egyptian priests would both credit it and have reasons for concocting the story—a series of assumptions collectively improbable. Nevertheless, the argument has been in general repeated by H. F. Tozer (History of Ancient Geography, 100-01) and E. J. Webb (Eng. Hist. Rev., Jan., 1907). Bunbury forgot that even a very long coasting voyage is not impossible in small vessels easily hauled up the beach along a coast where streams or wells would generally be met with every few days. As to their not recording the change of the seasons in the far south, sailors would surely not notice it during a slow progress of—say—thirty miles a day, and it did not concern them much so long as they got food and drink. Gold they could not find near the coast. The lack of profit or of exciting events is just what one would expect on the monotonous coast of Africa. Besides, did the Phoenicians ever give full information about their voyages? If, in this case they gave any, it would be only to King Necho. Would he be likely to divulge it? Disclosure of the results of State voyages was regularly forbidden down to the time of Captain Cook's three voyages (see Instructions to Captain Cook for his Three Voyages, in the Naval Miscellany, Vol. III, Navy Records Society, pp. 350, 355, 363).

Apart from writers already mentioned, the following have (a) attacked

or (b) defended the story of circumnavigation:—

(a) E. Meyer, A. H. Sayce (who seeks to discredit Herodotus as historian), Lepsius, Wiedemann, Baehr and H. Berger. The last has summed up their arguments thus in his Wissenschaftliche Erdkunde der Griechen, 2nd Ed., Leipzig, 1903, pp. 62-71:—

They impugn the record of Herodotus on Egyptian affairs owing to:—
(1) his inability to understand the Egyptian priests; (2) their reluctance to impart knowledge to strangers; (3) his having to trust inferiors who would show him over the temples, etc.; (4) his inaccuracy on several points of detail, on which Sayce expatiates at great length; (5) the phenomenon of the sun (as being added on to a trumped-up story of circumnavigation). But the tendency to-day is to rehabilitate the reputation of Herodotus for general accuracy, though admitting occasional lapses. On the question of the circumnavigation, his brevity and his noncommittal attitude should tell strongly in his favour.

(b) P. J. Junker, C. Ritter, Grote (III, 381 ff.), Heeren, Kiepert, Peschel, Maspéro, Lassen and Cary and Warmington. Maspéro accepts it chiefly because of the phenomenon of the sun, which Herodotus faithfully recorded, though neither he nor his authorities understood it. Cary and Warmington, after sifting the evidence, sum up in a cautious

affirmative (The Ancient Explorers, pp. 87-95).

Disbelievers in the circumnavigation make good debating points against it; but they do not assign sufficient weight either to the motives which impelled Egyptians and Phoenicians to make discoveries in the south, the great skill and tenacity shown by the latter in all such efforts, the comparative ease of circumnavigating Africa from east to west, or the adequate reasons why this particular effort was not repeated, being regarded as useless and therefore negligible. The fact that there persisted a belief in the circumnavigation of Africa argues that it had taken place. The nearly parallel case of the discovery of Vinland by Leif Ericsson, and the almost complete oblivion which long obscured that exploit, tell in favour of belief in the less difficult exploit of the Phoenicians.

APPENDIX II

Posts on the Sea Route to the East

SEAFARING peoples in due course develop a sea-sense which enables them at critical times to select the best posts for linking up trade routes; and I propose to illustrate this topic by a few notes on the succession to control of the East Indies. Naturally, the first warden was Portugal. Dowered by the Pope with all new lands discovered by her between Cape Bojador and India, she kept strictly closed the African coasts. Thus, in 1551-2, when merchants of London and Bristol opened trade with Barbary and Guinea, she threatened to "use them as mortal enemies." In fact, there was no peace beyond Madeira, as our traders found, from Lok and Towerson to Rutter and Hawkins. Clearly, she was resolved to own and keep secret the sea-route to the East. Yet, slowly but surely, that secret leaked out; for sailors are talkative.

Meanwhile, an important link in that route was becoming generally known. We need not debate here whether the first recorded discovery of Brazil, that by Cabral's East India expedition of 1500, was due to design or to S.E. winds and current beyond the Cape Verd Islands driving him far to the S.W. He sighted, at Easter, and therefore named Terra Crucis, a fertile coast containing a great bay, where the natives were friendly and ready to barter. A second expedition, in 1501, confirmed the news and reported a far-spreading coast, soon to be called Brazil from its red wood. As the wind and current of the S.E. Atlantic hindered a direct voyage from Cape Verd to the tip of Africa, sailing ships naturally made for the promising coast from Bahia to Rio de Janeiro, whence they generally found favourable winds. The Brazilian coast was therefore coveted, and though for a time the French settled Rio de Janeiro, yet Portugal expelled them thence in 1567. She therefore held all the maritime keys to India as far as Mombasa, and fortified it and other posts in East Africa.

In the S.E. Atlantic the Portuguese had, in 1501-2, discovered (but did not occupy), Ascension and St. Helena, the latter being so well watered that they stocked it with goats, sheep and hogs—to the great relief of later voyagers, from Cavendish to Dampier.² Here, indeed,

¹ See their accounts in Hakluyt, IV, 32-139: also Dr. Williamson's Sir John Hawkins.

² The English East India Company long held St. Helena and used it for refreshment of their ships on the homeward voyage: the Dutch occupied it only in 1645-52 and 1673. John Davis, in his Ruter to the East, calls it "the best place for the refreshing of men that I know in the sea."

was the weakness of that imposing Eastern Empire. Little Portugal could not garrison half of the necessary posts in it or on the way to it, including that central vantage point, Table Bay. Interlopers like Drake. Cavendish, Van der Noort and Schouten, made known the wealth and defencelessness of that Empire on its Pacific side. Therefore, attacks on it came fast, especially after 1580, when Philip II annexed all Portuguese possessions. In 1594 (as we saw in Chapter VI) his rigorous exclusion of all Dutch merchants thence, provoked them to recover their valuable carrying trade, by sailing direct to the East. In their second effort, of 1598, they seized Mauritius, an excellent base for attacks on the Spice Islands. The immense gains there secured encouraged them to form their well-organised Dutch East India Company (1601). Concentrating on Java and the Moluccas, it soon drove the Portuguese and English from all those islands—a proof of what could be achieved by good trade organisation, skilled seamanship and bold strokes dealt from an advanced base, Mauritius. So successful were some of the Dutch ventures that their Company paid dividends of 75, 50 and 621 per cent. in the years 1607, 1610 and 16161—gains far exceeding those of the English Company or of the Spanish treasure fleets.

In fact, Spain, when embroiled in the exhausting Thirty Years' War (1618-48), utterly failed to cope with Dutch efforts in the East. These had long outpaced those of the French. True, the Huguenots had long made brave efforts to plant settlements, especially in Florida. Pierre Hamon's map of the world (1568) named all North America La nouvelle France, but his patriotism could not save him from being hanged next year in Paris as a Huguenot. What wonder that French settlers were expelled from Rio, that Spain stamped out their colonies in Florida and that their efforts in the Senegal River hung fire? Not until 1642 was a French post established in Madagascar, and in 1664 an East

India Company started by Colbert.

Under James I English maritime enterprise wilted. In vain did Ralegh seek to revive it, or Mun urge us to promote East India commerce, because "remote trades are most gainful to the Commonwealth." James was obstinately insular. At most, he granted, in 1618, a Charter to merchant-adventurers of London to trade in the River Gambia. And in 1620, when two captains of our East India Company "took quiet and peaceable possession" of Table Bay, their far-seeing act was annulled. He and Charles I also accepted without protest the murder of twelve Englishmen by the Dutch in Amboyna (1623). Cromwell, after worsting our rivals in the First Dutch War (1652-4), and exacting reparation for

¹ Anderson, Origin of Commerce, II, 264, 268. See, too, Hannay, The Great Chartered Cos., Chap. 5, and Sir W. Foster, England's Quest of E. Trade, Chaps. 13, 14.

See this map in Ann. Report of the Soc. for Nautical Research (1935).
T. Mun, A Discourse of Eastern Trade, Chap. 4.

the outrage, failed to use the opportunity to procure the cession of Cape Town which they had occupied in 1652. James I's blunder was not repaired until 1806; and during that long interval, in which France occupied Mauritius, Ile de Bourbon and the Seychelles Isles, English commerce often suffered severely from French squadrons and privateers acting from those commanding bases (see Chapter XI).

These brief notes will suggest the importance of ports of call on the long East India voyage. That voyage not only induced shipbuilders and shipmen to make far greater exertions, but it compelled rulers and statesmen to face problems demanding foresight, energy and a due sense of proportion. Naturally, the early competitors failed in some essential. First, Portugal erred by occupying far more than she could hold. after annexing the Portuguese possessions, sought to possess two worldsan effort which exhausted her own Kingdom. Her maritime successors, the Dutch, long displayed better sea-sense and trade-sense. Strong in shipping, they gradually extended their operations until they built up new and vaster Echelles du Levant to the Spiceries. Cloves skilfully handled beat bullion misapplied; and thus dawned the age of capitalism working systematically in oversea commerce. Yet the Dutch also overreached themselves by striving to conquer Brazil. Naturally, after failing against Cromwell's up-to-date navy, they saw that over-ambitious effort collapse. But for long years they dominated the East Indies and the Cape route thither, until monopoly produced the usual results, as will appear in Chapters X, XI.

APPENDIX III

CHARGES AGAINST CAPTAIN COOK IN HAWAII

LATE in 1778, on his return to Hawaii (which he spelt Owyhee) Cook gave orders that, in order to prevent evil results, native women must not come aboard H.M.S. Resolution and Discovery. But as the crews needed fresh meat and fruit, and the natives were very eager for iron (one of the native chiefs thought he had a right to seize it), canoes crowded about the ships, and Cook found it impossible to exclude women; of them he wrote, "no women I ever met with were less reserved." 7th January, 1779, when bartering was brisk, four men and ten women came aboard; but in order to get rid of the latter he stood close in and landed all the fourteen. On the 16th, when the Master, Bligh, found a good anchorage in Karakakooa Bay, swarms of canoes came out to the ships, and many natives boarded them to barter, several staying all night. As, at dawn "several things were missing," Cook resolved to end this practice, and to hasten his departure for completing the survey of these islands. His charts of the group are highly praised in a paper of the Hawaiian Hist. Society for 1933: he deemed this discovery "in many respects the most important that had hitherto been made by Europeans throughout the extent of the Pacific Ocean."

These are the last words in his Journal; for when he put out to complete his charting of this group, a heavy gale beset his ships, and the Resolution sprang her top-mast. After both ships re-entered the bay, the natives seemed more difficult and exacting; while Cook had every reason for humouring them until he repaired the mast. Then occurred the theft of the Discovery's cutter, which led to the final affray.

In a careful review of the whole affair by Mr. J. F. G. Stoges in the Annual Report of the Hawaiian Historical Society (1930), the later charges against Cook are traced to the Rev. S. Dibble, an American missionary, who published them in his History . . . of the Sandwich Is. Mission (New York, 1839) and in A History of the Sandwich Is. (Lahainaluna, 1843). Dibble relied on oral accounts handed down by the natives during the sixty years intervening since Cook's murder; and damaging statements were now included. As to the divine honours which the natives had accorded to the captain, Dibble ignored the fact that semi-divine honours were later offered to the French explorer La Pérouse (see The Voyage of La Pérouse, Eng. Ed., p. 98), also to Captain Portlock (Voyage, p. 155). And he writes:—"An impression of wonder and dread having been made, Captain Cook and his men found little difficulty

in having such intercourse with the people as they chose. In regard to that intercourse, it was marked, as the world would say, with kindness and humanity. But it cannot be concealed that here and at this time, in the form of loathsome disease, was dug the grave of the Hawaiian nation; and from so deep an odium it is to be regretted that faithful history cannot exempt even the fair name of Captain Cook himself, since it is evident that he gave countenance to the evil. The native female first presented to him was a person of some rank; her name was Lelemahoalani. Sin and death were the first commodities imported to the Sandwich Islands. . . . That evil is sweeping the population to the grave with amazing rapidity."—Elsewhere Dibble states that Cook was "a libertine and murderer of the Hawaiians," and came to a deserved end by "the avenging agency of the Almighty."

These censures on Cook were repeated by a Protestant missionary, the Rev. Hiram Bingham in his History of Hawaii (Hartford, Conn., 1847). Finally, they have been endorsed by the Rev. Father R. Yzendoorn in his History of the Catholic Mission in the Hawaiian Islands (Honolulu, 1927). But their strictures on Cook are contradicted by a native work Mosolelo Hawaii (1838), in which one of the writers, David Malo, said that the visits of European ships had brought great benefits to the islanders.

If, while professing to write "faithful history," Dibble had consulted the records left in 1823 by earlier American missionaries, viz. Thurston, Bishop and Gooderich, he would have found that their impressions about Cook's conduct were quite favourable. Indeed, the nearer we go back to Cook's time the more eulogistic is the testimony to him. Thus, in 1809 an American, George Little, after conversing with several Hawaiians, reported their love for him, their grief at his murder, and their performing once a year a religious procession in honour of his memory (G. Little, Life on the Ocean, Baltimore, 1843). The evidence collected in Hawaii by Captains John Meares in 1787 and George Vancouver in 1792 is equally decisive. The former states that a number of natives begged him to take them "to Britannee, to the friends of Cook."

Also in all fairness Dibble should have consulted the contemporary written accounts left by Cook and his successor, Captain King. The latter declared that Cook evaded the divine honours "as soon as he decently could"; but the native priests persisted in ordering prostration before, and gifts of pigs to, the Orono. King then records the decline of respect after the mishap to the Resolution, also the increase in thieving by the natives, which ended in the stealing by night of the Discovery's cutter from its buoy. Cook went ashore to induce the native chief to come aboard the Resolution and remain there as hostage until the cutter was restored. That device had succeeded elsewhere in the Pacific islands when serious thefts occurred. Here, owing to a collision a short distance away, an affray began which ended in Cook's murder, a native stabbing

him when he turned to order our men not to fire. So (wrote King) "it is not improbable that his humanity on this occasion proved fatal to him."

If Dibble distrusted every Briton, there was a New Englander in the Resolution who might have been trusted. This was John Ledyard, corporal of marines, who, in his Journal of Captain Cook's Last Voyage (Hartford, Conn., 1783), wrote that, during that fatal dispute, Cook fired on his Hawaiian assailants only with blank cartridge, which so much encouraged them that they then rushed on him. Further, the photostats of the written declarations by his officers (now in the Hawaiian Archives) state that Cook had ordered them, if attacked, to fire only with blank cartridge, or, at worst, with small shot.

Immorality on the part of Cook was stoutly denied by H. Zimmermann, a sailor of the Resolution. In his account of Cook's voyage published in German in 1781 (English translation by Miss Tewsley) he stated that the Hawaiian women were very forward to the sailors, but that Cook punished immorality—"indeed the whole crew had to submit to an examination, and any men who were found to be diseased were refused permission to go ashore. . . . Never was there a breath of suspicion in regard to Cook's dealings with women." Cook even begged the men never to inflict venereal disease on native women. At Anamocka, during his second voyage, he was actually mocked at for his chastity. As to the charge about Lelemahoalani, Mr. Stoges tracks it to its source, and finds that it probably refers to an incident after Cook's death, and includes a slander on Captain Clerke of H.M.S. Discovery.

It is clear, then, that Dibble's censures on Cook for immorality and allowing loose conduct by his sailors, also for murdering the natives, are not only groundless, but contrary to fact. The more closely his behaviour to natives is examined, the more just and friendly it appears. But he saw the great difficulties ahead in dealing with Pacific islanders, and hoped that no European power would ever annex them.

¹ Cook's Third Voyage, Bk. V, Chaps. 1, 2.

APPENDIX IV

(The Statistics illustrate the State of Great Britain during the Napoleonic War.

See Chapter XI)

A

British Revenue in 1802-14 in £ (omitting ,000)

(Commons' Journals (1814-15), App. 11)

			Customs	Excise	Stamps	Assessed Taxes
1802	•••	•••	10,356	16,763	3,245	3,536
1803	•••	•••	9,555	18,258	3,436	4,269
1804	•••	•••	8,579	16,454	3,631	4,444
1805	•••	•••	9,104	17,833	4,194	4,570
1806	•••	•••	9,456	18,979	4,422	4,859
1807	•••	•••	9,573	19,621	4,543	5,476
1808	•••	•••	9,214	19,824	4,821	6,023
1809	•••	•••	10,532	19,385	5,463	6,971
1810	•••	•••	10,773	20,464	5,666	6,181
1811	•••	•••	9,676	20,617	5,396	6,066
1812	•••	•••	10,023	19,476	5,428	6,076
1813	•••	•••	10,325	20,805	5,638	6,581
1814	•••	•••	10,717	22,300	5,942	6,693

В

CHIEF IMPORTS OF RAW COTTON IN LBS. (OMITTING ,000) from:—
(Commons' Journals (1814-15), (App. 11). Those for 1812 are missing)

	1810	1811	1813
U.S.A	34,857	55,194	26,642
British West Indies	16,210	17,889	15,727
Europe	10,920	16,725	
Asia	10,927	23,144	730
All other parts			
(and Prize)	108	1,478	2,058

N.B.—The lists of values of cottons exported are scarce, except for 1813, when the chief were:—To Malta £2,413,000, Portugal £2,132,000, Gibraltar £1,983,000, U.S.A. £1,747,000, Brazils £1,557,000, Spain £498, Sweden £427.

C

IMPORTS OF WHEAT (IN QUARTERS) INTO GREAT BRITAIN FROM:—
(Commons' Journals (1814-15), App. 11)

	1802	1807	1810	1811	1812
Russia	8,025	5,709	58,126	27,968	50,957
Poland and Prussia	334,830	11,465	296,757	95,171	9,062
U.S.A	19,755	108,596	34,829	10,716	180
British North America	69,548	25,267	22,969	329	22,378

D

IMPORTS FROM THE PROVINCE OF CANADA INTO GREAT BRITAIN (Commons' Journals (1816), App. 11.)

	1802	1803	1804	1805	1806	1807
Wheat flour (in cwt.)	19,626	6,417	201	29	43	6,970
Masts of 12 in. and over	5 r	74	71	59	60	151
Oak (in loads)	383	1,985	1,951	2,465	3,687	5,733
	1808	1809	1810	1811	1812	
Wheat flour (in cwt.)	3,735	1,767	1,092	27	4,015	
Masts of 12 in. and over	348	1,265	1,769	1,580	1,282	
Oak (in loads)	8,826	5,852	17,226	24,42 I	18,047	

E

STATISTICS FOR 1812

Lowest Price of 3 per cent. Consols in:—		Number of Bankruptcies*	Average Price of Quartern Loaf	
Consons in :—		Dankruptcies	s. d.	
January	62 3	104	1 5	
February	621	163	I 4	
March	59 k	139	1 5 1	
April	581	120	т 6 1	
May	59 1	171	r 61	
June	551	158	1 7	
July	55 k	93	1 8	
August	56₺	107	1 8	
September	59 2	78	r 8	
October	56 7	86	1 7 1	
November	57 1	172	1 61	
December	57 8	225	z 61	

^{*} The total is 384 less than in 1811.

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